

## **TENDER DOCUMENT FOR**

**RESURFACING / RENEWAL AND MAINTENANCE WORKS OF  
UJJAIN – NAGDA ROAD (SH-17) – SECTION -1 (PART OF UJJAIN –  
JAORA ROAD)**

**(PROVIDING OF BITUMINOUS CONCRETE INCLUDING  
CLEANING OF ROAD SURFACE AND APPLYING TACK COAT  
FOR RESURFACING WORKS, REPAIR OF SUB BASE IF ANY  
REQUIRED, BERM FILLING ON BOTH SIDE AND CENTRE/EDGE  
LINE MARKING WITH THERMOPLASTIC PAINT)**

**Resolution Professional**

IBBI Regn: IBBI/IPA-001/IP-P00311/2017-18/10575

**Topworth Tollways (Ujjain) Private Limited**

**C/o Headway Resolution and Insolvency Services Pvt. Ltd.**

708, Raheja Center, Nariman Point, Mumbai-400021

Tel: 022 - 66107434 (D), 022-66107430 (Board)

Cell:+91 9920061236

Email: [cirpttu@gmail.com](mailto:cirpttu@gmail.com) , [anuj19603@yahoo.co.in](mailto:anuj19603@yahoo.co.in)

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WORKS OF UJJAIN – NAGDA ROAD (SH-17) SECTION -1 (PART OF UJJAIN –  
JAORA ROAD)**

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SURFACE AND APPLYING TACK COAT FOR RESURFACING WORKS, REPAIR OF  
SUB BASE IF ANY REQUIRED, BERM FILLING ON BOTH SIDE AND  
CENTRE/EDGE LINE MARKING WITH THERMOPLASTIC PAINT)**

Topworth Tollways (Ujjain) Private Limited C/o Headway Resolution and Insolvency Services Pvt. Ltd. invites sealed tenders in two bid system from eligible contractors for undertaking following works:

Name of Works : Resurfacing and maintenance works of Ujjain – Nagda Road (sh-17)  
Section – 1 (Part of Ujjain – Jaora Road)

providing of bituminous concrete including cleaning of road surface and applying tack coat for resurfacing works, repair of sub base if any required, berm filling on both side and centre/edge line marking with thermoplastic paint

Approx. Estimated Cost : Rs. 387.00 Lakhs

EMD : Rs.7.74 lakhs by Demand Draft / Bank Guarantee from  
National Bank

Eligibility : The eligible companies conforming to eligibility criteria laid down in the tender document may submit hard copy of documents as per tender in sealed envelope to Topworth Tollways (Ujjain) Private Limited C/o Headway Resolution and Insolvency Services Pvt. Ltd, the latest by **24th Feb. 2023** up to 1400 Hrs super scribing the envelope, enclosing all requisite documents, with name of work and drop the envelope in the tender box kept at TTUPL Reception. TTUPL reserves the right to reject any or all tenders and to call off the process of finalizing of contractors, at any stage without assigning any reasons

**TENDER  
NOTICE**

Ref no: \_\_\_\_\_

Dated: **10<sup>th</sup> Feb 2023**

**Resolution Professional, TTUPL invites sealed tenders in two bid system (Technical and Price Bid)  
from eligible contractors, for execution of the following works.**

<b>Name of work</b>	<b>Resurfacing / Renewal and Maintenance works of Ujjain – Nagda road (SH-17), Section -1 (Part of Ujjain – Jaora Road) (providing of bituminous concrete including cleaning of road surface and applying tack coat for resurfacing works, repair of sub base if any required, berm filling on both side and center/edge line marking with thermoplastic paint)</b>
<b>Estimated cost</b>	<b>Rs.387.00 LAKHS</b>
<b>Period of completion</b>	<b>180 days</b>
<b>Eligibility</b>	Tenderer should have successfully completed three similar works costing not less than the amount equal to 40% of estimated cost of work or two similar works costing not less than the amount equal to 60% of estimated cost of work or one similar work costing not less than the amount equal to 80% of estimated cost of work in last seven & current financial years.
<b>Cost of tender document</b>	<b>Rs.10000/-</b>
<b>Tender Ref No &amp; Due date</b>	_____, <b>24th Feb. 2023</b>
<b>Pre bid techno – commercial meeting</b>	Prebid meeting on 18 <sup>th</sup> Feb. 2023 (online system)

**Tender document should be downloaded from website: [www.headwayip.com](http://www.headwayip.com),  
Tenderer should enclose DD for Rs.10000/- towards the cost of tender document and  
EMD amount of Rs. 7.74 Lakhs along with the technical bid. Tenders not accompanied  
by the tender document fee and EMD will be rejected. Last date for submission of  
tenders is 24th Feb. 2023**

**Anuj Bajpai**  
**Resolution Professional**  
IBBI Regn: IBBI/IPA-001/IP-P00311/2017-18/10575  
**Topworth Tollways (Ujjain) Private Limited**  
**C/o Headway Resolution and Insolvency Services Pvt. Ltd.**  
708, Raheja Center, Nariman Point, Mumbai-400021  
Tel: 022 - 66107434 (D), 022-66107430 (Board)  
Cell:+91 9920061236  
Email: [cirpttu@gmail.com](mailto:cirpttu@gmail.com) , [anuj19603@yahoo.co.in](mailto:anuj19603@yahoo.co.in)  
[www.headwayip.com](http://www.headwayip.com)

**VOL-I**  
**Eligibility Criteria**

## **I. NOTICE FOR INVITATION OF TENDERS**

Online Tenders are invited by Mr. Anuj Bajpai - Resolution Professional, IBBI Regn: IBBI/IPA-001/IP-P00311/2017-18/10575, Topworth Tollways (Ujjain) Private Limited, C/o Headway Resolution and Insolvency Services Pvt. Ltd., 708, Raheja Center, Nariman Point, Mumbai-400021, Tel: 022 - 66107434 (D), 022-66107430 (Board), Cell:+91 9920061236, Email: cirpttu@gmail.com , anuj19603@yahoo.co.in , eligible Contractors, **for execution of for Resurfacing / Renewal and Maintenance works of Ujjain – Nagda road (sh-17) Section -1 (Part of Ujjain – Jaora Road) (providing of bituminous concrete including cleaning of road surface and applying tack coat for resurfacing works, repair of sub base if any required, berm filling on both side and center/edge line marking with thermoplastic paint)**

Tender to be addressed & Resolution Professional

Deposited at **Topworth Tollways (Ujjain) Private Limited  
C/o Headway Resolution and Insolvency Services  
Pvt. Ltd, Website [www.headwavip.com](http://www.headwavip.com)  
&**

Bid documents (required in Physical form as per tender) are to be deposited in a sealed envelope at reception of TTUPL duly marked as **TENDER DOCUMENT FOR FOR RESURFACING / RENEWAL AND MAINTENANCE WORKS OF UJJAIN – NAGDA ROAD (SH-17) SECTION -1 (PART OF UJJAIN – JAORA ROAD) (PROVIDING OF BITUMINOUS CONCRETE INCLUDING CLEANING OF OF ROAD SURFACE AND APPLYING TACK COAT FOR RESURFACING WORKS, REPAIR OF SUB BASE IF ANY REQUIRED, BERM FILLING ON BOTH SIDE AND CENTRE/EDGE LINE MARKING WITH THERMOPLASTIC PAINT)**

Earnest Money Deposit (EMD): an amount of Rs.7.74 lakhs (Rupees Seven Lakhs Seventy Four Thousand only) in the form of a demand draft in favor of Topworth Tollways (Ujjain) Private Limited C/o Headway Resolution and Insolvency Services Pvt. Ltd, payable at Mumbai from any nationalized bank.

Cost of Tender documents : an amount of **Rs.10000.00** (Rupees Twenty thousand only) in the form of a demand draft in favor of **Topworth Tollways (Ujjain) Private Limited C/o Headway Resolution and Insolvency Services Pvt. Ltd,** payable at **Mumbai** from any nationalized bank  
Time of Completion of work : 60 Days

Last Date and Time for  
Receipt of Tenders : 24th Feb. 2023 Up to 14.00 hrs.

**Resolution Professional, Topworth Tollways (Ujjain) Private Limited  
C/o Headway Resolution and Insolvency Services Pvt. Ltd. is not bound to accept the lowest tender and reserves the right to accept or reject any or all Tenders without assigning any reason whatsoever.**

The blank tender documents with eligibility criteria terms and conditions are to be downloaded from Headway Resolution and Insolvency Services Pvt. Ltd website: [www.headwayip.com](http://www.headwayip.com).

Tenderers are advised to follow the instructions provided in the 'Instructions to Bidders' for e-submission of the bids at [www.headwayip.com](http://www.headwayip.com)

## **II. GENERAL INSTRUCTIONS TO TENDERERS**

### **1.0 Scope of Tender:**

**Resolution Professional, Topworth Tollways (Ujjain) Private Limited invites sealed tenders in two bid system (Technical and Price Bid) from eligible Contractors, for execution of Resurfacing / Renewal and Maintenance works of Ujjain – Nagda road (sh-17) Section -1 (Part of Ujjain – Jaora Road)**

**(providing of bituminous concrete including cleaning of road surface and applying tack coat for resurfacing works, repair of sub base if any required, berm filling on both side and center/edge line marking with thermoplastic paint)** detailed in the Notice Inviting Tenders (NIT) The successful tenderer shall complete the works within the completion date specified in the Notice Inviting Tenders (NIT).

### **2.0 Non Association / Relation:**

Should a contractor or a tenderer have a relative, employed in TTUPL or in case of partnership firm or company incorporated under the Indian company act, should a partner or relative of the partner or a shareholder be employed in a responsible capacity in TTUPL, the authority inviting the tender should be informed of the fact at the time of submission of tender, failing which the tender may be rejected. If such fact is suppressed at the time of tendering and comes to light at any time after acceptance of tender, the contract may be rescinded.

### **3.0 Eligibility Criteria:**

S.No	Criteria	Documents Required
a	The tenderer should have minimum 5 years' experience in the field of road construction prior to 31.03.2021.	Valid certificates and Order copies and satisfactory completion certificates for seven years
b	Two Engineers (Graduate with minimum 2 years' experience and/or Diploma with 4 years' experience)	Tenderer shall submit list of Engineers on his permanent establishment with qualification & experience along with affidavits from requisite numbers of Engineers regarding employment with firm and copies of Degree/Diploma certificates and experience certificate.
c	The firm should have minimum annual turnover of Rs. 3.00 Crores for last three financial years	Turnover details or Audit reports



S.No	Criteria	Documents Required
d	<p>The firm should have carried out the works with Central Govt /State Govt Department as follows:</p> <p><b>i.</b> at least three (3) completed similar works costing not less than Rs.150.00 lakhs during the last 5 (Five) years ending with 31.03.2022</p> <p style="text-align: center;">OR</p> <p><b>ii.</b> at least two (2) completed similar works costing not less than Rs.200.00 lakhs during the last 5 (Five) years ending with 31.03.2022</p> <p style="text-align: center;">OR</p> <p><b>iii.</b> at least one (1) completed similar works costing not less than Rs.350.00 lakhs during the last 5 (Five) years ending with 31.03.2022.</p> <p>Similar works: - <b>Providing, laying with sensor paver the bitumen mix of BM &amp; BC work from Hot Mix Plant.</b></p>	Order copies and satisfactory completion certificates of Govt organizations only, clearly indicating the cost & nature of work handled.
e	The firm must have G S T registration number and PAN number.	Copies of the registration certificate and PAN card copy shall be enclosed.
f	<p><b>Working capital :-</b></p> <p>The tenderer should have working capital and /or credit facilities more than 50% of the estimated cost of work.</p>	Copy of latest balance sheet/ income tax return for working capital and/or Banker's certificate for credit facilities. If necessary deptt will make inquiries with the tenderer's Banker.
g	<p><b>Details of Vehicles/Equipment/Plants</b></p> <p>Tenderer should own or have assured access (through hire/ lease/ purchase agreement / other commercial means) to the requisite Equipments, Plants and Vehicles in good working condition as per Statement-V</p>	Copy of documentary support of ownership/assured to the satisfaction of the Accepting officer

#### **4.0 Qualification of the Tenderer**

4.1 All Tenderers shall provide Eligibility Criteria information as per proforma enclosed.

4.2 All Tenderers shall include the following information by producing relevant documents and certificate with their Tender.

(a) Conditions of the contract enclosed each page duly signed by the tenderer as token of acceptance. If any deviation is proposed by the tenderer the same must be clearly indicated and enclosed as deviation list but tenders with significant deviations list and merely enclosing tenderer's printed conditions or their own terms and conditions will make the tender liable for rejection.

(b) Earnest money deposit as laid down in these instructions to tenderers. (c)

Tender document cost.

(d) Tender Processing fees as per Instructions to bidders for e-tendering

#### **5.0 Cost of Tendering & inspection of site**

5.1 The Tenderer shall bear all costs associated with the preparation and submission of his Tender, tenderer shall not be entitled to any cost, expenses or other claims whether or not the tender is accepted, rejected or invitation to Tender withdrawn or cancelled and the TTUPL will in no case/way be responsible and liable for those costs.

5.2 The Tenderer, at the Tenderer's own responsibility shall visit and examine the Site of Works and its surroundings and obtain all information that may be necessary for preparing the Tender and entering into a contract for Execution of Resurfacing and maintenance works of Ujjain – Jaora Road (sh-17) providing of bituminous concrete including cleaning of road surface and applying tack coat for resurfacing works, repair of sub base if any required, berm filling on both side and centre/edge line marking with thermoplastic paint. The costs of visiting the site shall be at the Tenderer's own expense.

5.3 The tenderer should inspect the site during working hours (i.e. 9.00Hrs to 18.00Hrs) on working days (i.e. Monday to Saturday)

**ELIGIBILITY CRITERIA INFORMATION  
CHECKLIST TO ACOMPANY THE TENDER  
(Bidder should fill up YES or NO without fail)**

S/No	Bid Enclosures	YES or NO
1	<b>Details of firm (PSU/Pvt Ltd/Partnership/Proprietor ship)</b>	
2.	Whether the Tender is submitted in <b>Two covers Technical Bid and Price Bid online?</b>	
3.	<b>Whether Technical Bid (Envelope- A) contains the following</b>	
3.1	Bidder's undertaking covering letter in the Letter Head shall be signed by the authority, stamped and submitted.	
3.2	Signed and stamped Letter of Authorization or Power of Attorney for signing the Tender document shall be submitted.	
3.3	All sections covered in the Tender document in full shall be signed by the authority, stamped and submitted	
3.4	Tender Cost and Earnest Money Deposit (EMD) amount as specified in the Tender shall be submitted. Original copy of Tender Cost and EMD shall be submitted to TTUPL, Mumbai before date of opening of bid documents.	
3.5	Filled up Technical Bid and Profile of bidder shall be signed by the authority, stamped and submitted	
3.6	Unfilled price bid format shall be signed by the authority, stamped and submitted	
3.7	All supporting documents for proving the Eligibility Criteria shall be signed by the authority and stamped in all pages	
3.8	Whether Tender processing fee as specified in the Tender shall be submitted. Original copy of Tender processing fee in favour of <b>Topworth Tollways (Ujjain) Private Limited</b> C/o Headway Resolution and Insolvency Services Pvt. Ltd, payable at <b>Mumbai</b> shall be submitted to TTUPL, Mumbai before date of opening of bid documents.	

<b>3.9</b>	<b>Supporting documents to meet the Eligibility Criteria</b>	<b>YES or NO</b>
	a) All the supporting documents to meet the Eligibility Criteria as laid down in the Tender under Eligibility Criteria shall be signed by the authority and stamped	
	b) Bidder's Certificate of Incorporation or Registration	
	c) Balance Sheet and Profit & Loss accounts for the past three year should be submitted.	
	g) Clientele list for the similar works executed.	

- ☐ Checklist should be enclosed in technical bid
- ☐ All experience certificates including those in support of existing commitments issued by an Officer not below the rank of Executive Engineer (or) Equivalent grade.

## STATEMENT – I

Details of value of Road works (Turnover) executed in each year during the last three financial years by the Tenderer.

Sl. No.	Financial Year	Value in Rs.
1.	2017-2018	
2.	2019-2020	
3.	2020-2021	
4.	2021-2022	
5.	2022-2023	

Attach certificate(s) issued by the Equivalent Authority to Executive Engineer or concerned head of the department showing work wise / year wise value of work done in respect of all the works executed by the Tenderer during last three years

**Signature of the Contractor**

## STATEMENT – II

Details of similar works completed in the name of the Tenderer during the last five financial years.

Sl. No	Name of the work	Address of Agreement. Concluding Authority	Agreement No. & dated. With telephone number	Value of Contract In Lakhs	Stipulated period of completion	Actual date of completion
1	2	3	4	5	6	7

Value of work had done year wise during the last 'five' years.					Total value of work done.
1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year	
8	9	10	11	12	13

Attach certificates issued by the Equivalent Authority to Executive Engineer or concerned head of the department showing work wise / year wise value of work done and date of completion.

**Signature of the Contractor**

### STATEMENT – III

Physical quantities executed by the Tenderer in the last five financial years.

[Work wise / year wise].

Sl. No	Financial Year	Name of Work	Agt. No	Quantities executed / Year wise						
				Item-1	Item-2	Item-3	Item-4	Item-5	Item-6	Item-7
1	2	3	4	5	6	7	8	9	10	11
1				GSB	WMM	DBM	SDBC	BM	BC/A C	Road marki ng
2	2018-2019									
3	2019-2020									
4	2020-2021									
5	2021-2022									
6	2022-2023									

Attach certificates in support of the above quantities issued by the Executive Engineer or concerned head of the department duly showing the quantities executed year wise.

**Signature of the Contractor**

**STATEMENT – IV A**  
**Details of Existing Commitments**

Details of works on hand and yet to be completed as on the date of submission of the Tender and works for which Tenders have been submitted are to be furnished.

**A) Existing Commitments on ongoing works:**

Sl. No	Name of work	Address of Agt. Concluding authority	Agt No. & Date	Value of contract	Stipulated period of completion	Value of work done so far	Balance Value of works to be completed	Anticipated date of completion	Updated value of balance work
1	2	3	4	5	6	7	8	9	10

Attach certificates issued by the Equivalent Authority to Executive Engineer or concerned head of the department indicating the balance work to be done, and likely period of completion.

**Signature of the Contractor**

### STATEMENT – IV B

#### B) Details of works for which Tenders are submitted [awarded / likely to be awarded]

Sl.No	Name of work	Address of Agt. Concluding authority	Estimated value of work	Stipulated period of completion	Date on which tender was submitted	Present stage of tender
1	2	3	4	5	6	7

**Signature of the Contractor**

### STATEMENT - V Availability of Vehicles/Equipment/Plants

The tenderer should furnish the information required below, regarding the availability of the equipment, required for execution.

Sl. No	Details	Number Required	Number		
			Owned	Leased	To be procured
1	2	3	4	5	6
(i)	HMP (90/120 TPH)	01			
(ii)	Paver finisher	02			
(iii)	Vibratory roller	02			
(iv)	Tandem Roller	02			
(v)	Pneumatic Tyre Roller	01			
(vi)	Tipplers	07			
(vii)	Tar boiler	02			
(viii)	Mechanical broomer/Air compressor	02			
ix)	Road marking Machine	02			
x)	Milling Machine	01			

**Signature of the Contractor**

#### Note:-

(a) Tenderer shall indicate source of requisite Equipment's, Plants and Vehicles in good working condition required for execution of work in following format :-

1. Item
2. Year of manufacture
3. Source from where to be arranged (owned/leased etc) (iv)  
Location presently deployed
4. Based on known commitments, whether will be available for use in the proposed contract

(b) Copy of documentary support of ownership/assured to the satisfaction of the Accepting officer.



**STATEMENT – VI**  
**Availability of Key Personnel**

Qualification and experience of Key Personnel proposed to be deployed for execution of the Contract.

Sl.No	Name	Designation	Qualification	Total	Working with
1	2	3	4	5	6

**Signature of the Contractor**

**STATEMENT - VII**

Information on litigation history in which Tenderer is the Petitioner

Sl.No	Case No / year	Court where filed	Subject Matter / Prayer in the case	Details of Respondents	Present Stage
1	2	3	4	5	6

**Signature of the Contractor**

## **STATEMENT – VIII**

**Tenderer shall submit undertaking that:-**

- (a) There is no poor/slow progress in running work. (If yes, submit details and reasons of delay to check that these are not attributable to him or are beyond his control).
- (b) There are no serious defect observed in works which stand uncertified (If yes, submit details and reasons)
- (c) There are no cancelled/ abandoned contracts in which Govt unrealized recoveries exist (If yes, submit details and reasons)
- (d) He/They have not been blacklisted by any Govt Deptt (If yes, submit details and reasons)
- (e) There are no any Govt dues outstanding against the firm (If yes, submit details and reasons) (f) Proprietor/partners/directors of firm are not involved in antinational/social activities and have neither been convicted nor any proceeding are pending in court for such activities (If yes, submit details)
- (g) Tenderer should not be habitual litigant i.e. having more than 3 unsuccessful arbitration/court cases during last years in which his views/claims substantially rejected.

I /we declare that I / We will abide by any action such as disqualification or determination of Contract or blacklisting or any action deemed fit, if the department detects any misleading or false information in bidding documents submitted by us.

**Signature of the Contractor**

## **6.0 Contents of documents**

- Contract documents consists of
- Notice for invitation of Tenders
- Instructions to Tenderers
- Articles of Agreement
- General conditions of contract (GCC)
- Special conditions of contract (SCC)
- Form of performance guarantee / Bank guarantee bond
- General Technical Specifications
- Approved Makes
- Bill of Quantities
- Scope of work

The Tenderer shall be deemed to have examined all instructions, forms, terms, and specifications in the Documents. Failure to furnish the information required by the Tender Document or submission of a Tender not substantially responsive to the Tender Documents in every respect will be at the Tenderer's risk and may result in the rejection of the Tender.

The several documents forming the contract are to be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawing and figured dimensions in preference to scale and Special Conditions in preference to General Conditions.

In case of any discrepancy between the Schedule of Quantities, the specifications and/ or the drawings, given in the tender document the following order of preference shall be observed:

Description of Schedule of Quantities.

Particular Specification and Special condition, if any.

Specifications.

Latest edition Indian Standard Specifications of Roads (MORTH Specifications).

## **7.0 Amendment of Tendering Documents**

7.1 Before the deadline for submission of Tenders, the TTUPL may modify the Tender documents by issuing addenda.

7.2 TTUPL shall have the right to amend/delete/add to the various provisions in the tender documents or withdraw/cancel the invitation to tender without assigning any reasons whatsoever. The amendments/errata if issued by the TTUPL shall be read carefully in conjunction with tender documents. The quoted price/rate/amount shall be deemed to be worked out taking into account amendments / errata also.

7.3 Any addendum thus issued shall be part of the Tender documents.

7.4 To give prospective Tenderers reasonable time in which to take an addendum into account in preparing their Tenders, the TTUPL may extend if necessary the deadline for submission of Tenders.

## **8.0 Earnest Money Deposit (EMD)**

8.1 Tender EMD amount of Rs. 7,74,000/- in the form of a demand draft / Bank Guarantee from nationalized bank in favor of Topworth Tollways (Ujjain) Private Limited, C/o Headway Resolution and Insolvency Services Pvt. Ltd, payable at Mumbai must accompany each Tender. Tenders not accompanied by EMD and unconditional acceptance letter will be summarily rejected.

8.2 The EMD of the unsuccessful Tenderers will be discharged / returned within 8 weeks from the last date of tender submission. The EMD of the successful Tenderer shall be retained till submission of performance guarantee as per clause 23 of general instructions.

8.3 The E M D of successful tender shall be refunded on submission of performance guarantee or adjusted with performance guarantee as per clause 23 of general instructions.

8.4 The EMD may be forfeited: if the Tenderer withdraws his Tender during the validity period of the Tender; or in case of a successful Tenderer fails to furnish performance guarantee.

## **9.0 Period of validity of Tender**

The Tender shall remain valid for a period of **90 days** after the last date of the submission of tender. A Tender valid for a shorter period, may be rejected by the TTUPL.

## **10.0 Language of Tender**

10.1 The document shall be written in English language. The total amount should be written in the same language.

10.2 if any, and other information shall be prepared and submitted in English language only.

## **11.0 Document comprising the Tender**

11.1 No page of this Tender document shall be removed and the set must be submitted as it is. Each page of the Tender document form is to be signed by the Contractor and must bear the Seal of the Company/Firm.

11.2 The entire bid-submission would be online on [www.headwaysip.com](http://www.headwaysip.com) (unless specified for Offline Submissions). Before participating tender online, read 'Instructions to Bidders' carefully. Broad outline of submissions are as follows: Submission of Bid-Parts  
Envelope I (Technical Bid)

## Envelope II (Financial-Bid)

### 11.3 **Offline submission of documents:**

In addition to the above, the bidders are required to submit the following documents physically offline also in a Sealed Envelope, failing which the technical bids will not be opened.

- i. Covering letter as per format given in tender document.
- ii. Original copy of the Earnest money deposit as laid in these instructions to tenderers..
- iii. Original Power-of-Attorney supplemented with Board resolutions, if any.
- iv. Tender cost of Rs.10000/- in the form of D.D.
- v. DD/ Banker's cheque in favor of Topworth Tollways (Ujjain) Private Limited, C/o Headway Resolution and Insolvency Services Pvt. Ltd as per 'Instructions to Bidders; against payment of tender processing fee
- vi. Original copy of the Consortium Agreement, If any

The envelope shall bear {the name of work and the words 'DO NOT OPEN BEFORE' (due date & time).

**Note: The Bidder should also upload the scanned copies of all the above mentioned original documents as Bid-Annexures during Online Bid- Submission.**

### 11.4 **Price Bid**

Only online price bids shall be considered.

11.5 The Bidder should submit the Bids so as to reach the address indicated below by 1400 hrs (IST) on or before 24th Feb, 2021:-

## 12.0 Tender Prices

12.1 The contract shall be for the whole works as described in tender document based on the priced Schedule of Quantities submitted by the Tenderer.

12.2 The tender submitted on behalf of a Firm/Company, shall be signed by a person who has the proper legal authority on behalf of the Company to enter into the contract; otherwise, the tender is liable to be rejected. Each page of the tender document is required to be signed by the authorized person submitting the tender, affixing the Firm/company seal in token of their having examined and acquainted themselves with the contents of each page. The forms of tender are to be filled in completely. Any tender with any of the documents not duly signed is liable to be rejected.

12.3 The Tenderer shall fill in the rates for all items of the Works described in the Schedule of quantities along with total tender price. In case the rates are not filled for any of the Items of Schedule of Quantities, in such cases the rate will be considered as zero and the contractor has to accept for the amount arrived based on zero rate for non quoted items. Failure to comply with either of these conditions will make the tender liable for rejection and forfeiture of Earnest money.

12.4 All duties, taxes, and other levies payable by the Contractor under the contract, or for any other cause, shall be included in the rates, prices and total tender price submitted

by the tenderer. Tenderers must include in their rates, the cost of transportation of materials to site, GST, Income tax, Cess as per Building & Other Construction Workers Cess Act, octroi, and any other tax and duty levied by the Central / State Government. None of the above taxes & levies will be entertained separately by the TTUPL and no tax exemption forms will be issued by the TTUPL. All the taxes levied other than IT should be paid either directly by the contractor to the statutory authorities and challans / proof of payment with acknowledgement shall be provided by the contractor before release of the payment of next bill or shall be deducted at source. Contractor should also take a Group Insurance Policy for his Workmen, Supervisors and Engineers working on site for an adequate insurance cover. TTUPL shall not be responsible for any accident or any untoward/unforeseen event involving workmen, labour, supervisor or engineer or any person directly or indirectly associated with the execution of work. The insurance policy to be obtained by the successful Tenderer must be comprehensive and shall cover all associated risks (known and unknown) from any Government Insurance Company.

12.5 The rates quoted in the tender shall include cost of telephone rent and call charges, for execution of work at site, hire for any tools and tackles, shed for materials, marking out and transportation complete, cleaning the roads and surroundings after execution of the total works and dumping the waste at designated place as directed by the TTUPL in all respects. The rates quoted in the tender shall be treated as rates for finally completing the item of work.

12.6 The quantities furnished in the schedule of quantities are only probable quantities and are liable to alterations, by omission, deductions or additions to any extent at the discretion of TTUPL. Payments will be regulated on the actual quantities of work done at accepted rates. Any item of work may be omitted from the schedule of quantities and may be awarded to another agency at any time / stage of the work for which no compensation will be paid by the TTUPL i.e. for non-operated BOQ items and short closed BOQ items.

12.7 The rates and prices quoted by the Tenderer shall be fixed for the duration of the contract and shall not be subject to escalation or adjustment on any account even if the work is delayed due to unavoidable circumstances beyond the control of TTUPL.

12.8 The tenderers must obtain for themselves on their own responsibility and their own expenses all the information which may be necessary, including risks, contingencies and other circumstances to enable them in making a proper tender and for entering into a contract, and must examine the specifications and conditions and inspect the site of the work, nature of the work, availability of power, water, shelter for workmen and all the matters pertaining thereto before submitting the tender.

### **13.0 Format and signing of Tender document**

13.1 The tenderer shall seal the bid in an envelope, duly marked as **TENDER FOR Resurfacing / Renewal and Maintenance works of Ujjain – Jaora road (sh-17) (providing of bituminous concrete including cleaning of road surface and applying tack coat for resurfacing works, repair of sub base if any required, berm filling on both side and center/edge line marking with thermoplastic paint)**, Which shall include Tender form  
(Signature of Contractor with Seal) Page 23 of 101 Accepting Officer

duly signed by the tenderer on their letter head along with documents mentioned under clause 11.

13.2 The Tender shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the Tenderer. All pages of the Tender where entries or amendments have been made shall be initialed by the person or person signing the Tender.

13.3 The Tender shall contain no alterations or additions, except those to comply with instructions issued by the TTUPL, or as necessary to correct errors made by the Tenderer, in which case such corrections shall be initialed by the person or persons signing the Tender. ANY CONDITIONAL TENDER WILL BE SUMMARILY REJECTED.

#### **14.0 Sealing and marking and submission of Tenders**

The Tenderers are requested to quote their offers online and submit offline documents as per clause No.11

#### **15.0 Last date for submission of Tenders**

15.1 Any Tender received by the TTUPL after the date and time of submission of Tenders i.e. up to 14.00 Hrs On **24th Feb. 2023** will be rejected and returned unopened to the Tenderer.

#### **16.0 Clarification of Tenders**

16.1 To assist in the examination, evaluation, and comparison of Tenders, the TTUPL may, at his discretion, ask any Tenderer for clarification of his Tender, including breakdowns of unit rates. The request for clarification and the response shall be in writing or by Fax/email, but no change in the price or substance of the Tender shall be sought, offered, or permitted.

#### **17.0 Examination of Tenders and Determination of Responsiveness**

17.1 Prior to the detailed evaluation of Tenders, the TTUPL will determine whether each Tender (a) meets the eligibility criteria defined in clause 3.0; (b) has been properly signed and meets the requirements (c) is accompanied by the required securities and; (d) is substantially responsive to the requirements of the Tendering documents.

17.2 A substantially responsive Tender is one which confirms to all the terms, conditions, and specifications of the Tendering documents, without material deviation or reservation. A material deviation or reservation is one (a) which affects in any substantial way the scope, quality, or performance of the Works (b) which limits in any substantial way, the TTUPL rights or the Tenderers' obligations under the contract; or (c) whose rectification would affect unfairly the competitive position of other Tenderers presenting substantially responsive Tenders.

17.3 If a Tender is not substantially responsive, it will be rejected by the TTUPL, and may not subsequently be made responsive by correction or withdrawal of the nonconforming deviation or reservation.

## **18.0 Correction of Errors**

Only online price bids shall be considered. No correction/modification is permissible in online BoQ (Excel sheet).

## **19.0 Evaluation and Comparison of Tenders**

19.1 The TTUPL will evaluate and compare only the Tenders determined to be prequalified and substantially responsive.

20.0 The TTUPL reserves the right to accept or reject any variation, deviation, or alternative offer and other factors which are in excess of the requirement of the Tendering.

## **21.0 Award criteria**

21.1 The acceptance of Tender will rest with the TTUPL, which does not bind itself to accept the lowest tender and reserves to itself the authority to reject completely / partially, any or all of the Tender/s received without the assignment of a reason.

21.2 The TTUPL reserves to itself the right of accepting the whole or any part of the Tender and the Tenderer shall be bound to perform the same at the rate quoted.

21.3 The TTUPL reserves to itself the right of omission of any item of work from the awarded tender at any time / stage during the execution of work and award the same to another agency / contractor.

## **22.0 Notification of award**

22.1 The successful Tenderer will be issued a Letter of Intent (LOI) / Purchase Order (PO) / Work order (WO) and the date of commencement of work will be as mentioned in the LOI or PO or WO.

## **23.0 Performance Guarantee for execution of contract.**

The successful tenderer shall submit the performance guarantee for an amount equal to **5 %** of approved tender amount in the form of Bank guarantee from nationalized bank within 5 (Five) days from issue of LOI / PO / WO. Bank guarantee is to be valid for a period up to **Two year from** the actual date of completion. This PBG will be refunded after six month after recording completion certificate.

Failure of the successful tenderer to make payment of performance guarantee shall constitute sufficient ground for the annulment of the award and forfeiture of EMD.

## **24.0 Security Deposit (SD) and Retention Money:**

### **24.1 Security Deposit (SD) and Retention Money:**

(Signature of Contractor with Seal)

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Accepting Officer



A sum equal to 5% of the gross amount of the bill shall be deducted from each bill including final bill. On completion of work this amount will be released along with final bill on submission of equivalent amount bank guarantee from nationalized bank valid for a period up to defect liability period (i.e. 24 months from completion certificate) plus 2 months. This amount / bank guarantee will be released after successful completion of the defect liability period. The contractor is eligible for refund of full security deposit if the defects in workmanship and quality of work are attended by the contractor. Failing which the cost of rectification of defects shall be recovered from security deposit. The contractor shall obtain no defects certificate after completion of defect liability Period, from concerned TTUPL authority before claiming the refund.

## **25.0 Signing of contract form**

25.1 On the acceptance of LOI / PO / WO and Performance Guarantee of the successful Tenderer, the TTUPL will send the Tenderer the contract form provided in the Tender document duly signed and sent along with the Tender incorporating all agreements between the parties.

## **26.0 During Execution**

26.1 The Contractor shall carry out all the works strictly in accordance with the details and instructions of the TTUPL. If in the opinion of the TTUPL, changes have to be made in the design, and they desire the contractor to carry out the same, the Contractor shall be bound to comply. The TTUPL decisions in such cases shall be final.

26.2 The Contractor is bound to carry out any items of work necessary for the completion of the job even though such items are not included in the schedule of quantities and rates. Schedule of instructions in respect of such additional items and their quantities will be issued in writing by the TTUPL. Rates for such items of work will be recommended for approval by the TTUPL on the basis of Analysis of Rates which will be derived from actual prevailing market rates of similar item along with 10% as contractor's profit & overhead. The rates approved by the TTUPL in such cases will be final.

26.3 The TTUPL may at any time / stage of execution demand for the Analysis of Rates for any item / items of work which in their opinion is are abnormally high / low rates or required for the Analysis of Rates of other tender / extra item / items. The Contractor is bound to present the same and if the Contractor is unable to present a justified Analysis of Rates for any item / items, the rate / rates for such item may be adjusted accordingly and the decision of the TTUPL in such cases shall be final.

26.4 The Contractor shall get the quality of work done inspected for material and workmanship at different stages of execution as per instructions given by the TTUPL or their representative time to time. Any item of work done which is found not conforming to the Contract shall be rejected by the TTUPL. The decision of the TTUPL in such cases shall be final.

26.5 The TTUPL may instruct at any stage of execution for testing of any material taken at random. **The TTUPL will decide the testing laboratory / agency and the cost of testing including the expenses for sending the samples to the laboratory / agency and receipt of test reports shall be borne by the Contractor.** The material shall be rejected in case the test reports are not within the permissible limits. In case material is found to be of sub- standard quality, the same shall be rejected by the TTUPL. The decision of the TTUPL in such cases shall be final.

26.6 The Contractor shall not be entitled to any compensation suffered by him on account of delays in commencing or executing the work whatever the cause of delay may be, including delays arising out of modifications to the work entrusted to him or in any subcontracts connected therewith or delays in awarding contracts for other trades of the project or in commencement or completion of such other works or in procuring Government controlled or other building materials for any other reasons whatsoever. The TTUPL shall not be liable for any sum besides the tender amount, subject to such variations as are provided for here in and as instructed by TTUPL. However, necessary time extension will be given if the delays are not attributed to the Contractor.

## **27.0 Clarifications on tender and pre bid meeting at TTUPL, MUMBAI**

27.1. For any technical and other than technical clarifications in connection with this invitation to tender, tenderer may contact:

### **Resolution Professional**

IBBI Regn: IBBI/IPA-001/IP-P00311/2017-18/10575

**Topworth Tollways (Ujjain) Private Limited**

**C/o Headway Resolution and Insolvency Services Pvt. Ltd.**

708, Raheja Center, Nariman Point, Mumbai-400021

Tel: 022 - 66107434 (D), 022-66107430 (Board)

Cell:+91 9920061236

Email: [cirpttu@gmail.com](mailto:cirpttu@gmail.com) , [anuj19603@yahoo.co.in](mailto:anuj19603@yahoo.co.in) [www.headwayip.com](http://www.headwayip.com)

### III. ARTICLES OF AGREEMENT

This Agreement is Made at .....this  
..... day of.....2023...Between **Topworth Tollways (Ujjain) Private Limited**  
**C/o Headway Resolution and Insolvency Services Pvt. Ltd** (Hereinafter referred to as the TTUPL  
which expression shall include its heirs, Executors, Administrators & Assignees) of the one  
part and

.....

.....

..... (Hereinafter referred to as the  
Contractor which expression shall include his heirs, Executors, Administrators &  
Assignees) of the other part

WHEREAS the TTUPL is desirous of carrying out EXECUTION OF RESURFACING AND MAINTENANCE WORKS OF UJJAIN – JAORA ROAD (SH-17) PROVIDING OF BITUMINOUS CONCRETE INCLUDING CLEANING OF ROAD SURFACE AND APPLYING TACK COAT FOR RESURFACING WORKS, REPAIR OF SUB BASE IF ANY REQUIRED, BERM FILLING ON BOTH SIDE AND CENTRE/EDGE LINE MARKING WITH THERMOPLASTIC PAINT and has prepared specifications and scope work describing the work to be done and WHEREAS the said specifications and the priced Schedule of quantities have been signed by or on behalf of the parties hereto and WHEREAS the Contractor has agreed to execute upto and subject to the conditions set forth herein (hereinafter referred to as “the work shown and described in “the said Specifications & scope of work” and the said “Priced Schedule of Quantities at the respective Rates mentioned in the Priced Schedule/ Purchase Order of Quantities attached.

And WHEREAS the Contractor has agreed to the submit the performance guarantee to TTUPL for Rs 11,25,000 (Rupees Eleven Lakh Twenty Five Thousand only) or amount equal to 5% of quoted cost, by him as performance guarantee for the due fulfillment of the contract to the satisfaction of the TTUPL.

#### **NOW IT IS HEREBY AGREED AS FOLLOWS:**

(1) In consideration of the payments to be made to the Contractor as hereinafter provided he shall upon and subject to the conditions of contract execute and complete the works described in the Specifications & scope of work and the said Priced Schedule of Quantities.

(2) The TTUPL shall pay the Contractor such sums as shall become due and payable hereunder at the times and in the manner specified in the said conditions.

(3) The tender specifications, agreement, documents, scope of work and terms and conditions of NIT above mentioned shall form the basis of this Contract and the decision of the TTUPL for the time being as mentioned in the Conditions of the Contract in reference to all matters of dispute as to the material, workmanship or account and as to the intended interpretation of the clauses of this agreement or any other document attached hereto shall be final and binding on both parties.

(4) The TTUPL reserves the right of altering the drawing and nature of work and of adding to or omitting any items of work and of having portions of the same carried out departmentally or otherwise and such alterations or variations shall be carried out without prejudice of this contract.

(5) The said Contract comprises the work above mentioned and all subsidiary works connected there to within the same site as may be ordered to be done from time to time by the TTUPL for the time being even though such works may not be shown on the Tender or described in the said specifications or the Priced Schedule of Quantities.

(6) **Time shall be considered as essence of the agreement** and the contractor hereby agrees to commence to work as soon as his tender is accepted by TTUPL by issuing LOI / WO / PO and the site is handed over to him as provided in the said conditions and agrees to complete the work within the period **60 Days** from the date of such handing over the site.

(7) The said conditions shall be read and construed to be forming part of this agreement and the Parties hereto will respectively abide by and submit themselves to the conditions and stipulations and perform the agreement on their parts respectively in such conditions contained.

(8) The disputes arises if any, The decision of TTUPL Authority/ Consultant will be final and agreed by and bounded on contractor, else All disputes arising out of or in any way connected with this agreement shall be deemed to have arisen in Mumbai and only the courts in Mumbai alone shall have jurisdiction to determine the same.

(9) The arbitrator for fulfilling the duties set forth in the arbitration clauses as defined with tender conditions of contract.

(10) Arbitration: (i) **In case the Contractor is a Public Sector Enterprise or a Government Department**, the dispute shall be referred for resolution in Permanent Machinery for Arbitration (PMA) of the Department of Public Enterprise, Government of India. Such dispute or difference shall be referred by either party for Arbitration to the sole Arbitrator in the Department of Public Enterprises to be nominated by the Secretary to the Government of India in-charge of the Department of Public Enterprises. The award of the Arbitrator shall be binding upon the parties to the dispute, provided, however, any party aggrieved by such award may make a further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law & Justice, Government of India. Upon such reference the dispute shall be decided by the Law Secretary or the Special Secretary / Additional Secretary, when so authorized by the Law Secretary, whose decision shall bind the Parties finally and conclusive. The Parties to the dispute will share equally the cost of arbitration as intimated by the Arbitrator.

(ii) **In all other cases** : The Contract shall be governed by , and construed in accordance with the laws of India. Any dispute which cannot be amicably settled by the parties will be settled following the provisions of Arbitration and Conciliation Act, 1996. Both Parties agree that the results and awards of any such arbitration shall be binding on both Parties. Venue of Arbitration shall be New Delhi.

(11) The several parts of this contract have been read to us and fully understood by us.

As witness our hands this.....day of  
.....2023.....

.....

Signed by the said **TTUPL**

.....

in the presence of

.....

Signed by the said **Contractor**

..... In the  
presence of

#### **IV - FORM OF TENDER**

(To be submitted by the Tenderer in letter head).

From :

To

**Resolution Professional**

IBBI Regn: IBBI/IPA-001/IP-P00311/2017-18/10575

**Topworth Tollways (Ujjain) Private Limited**

**C/o Headway Resolution and Insolvency Services Pvt. Ltd.**

708, Raheja Center, Nariman Point, Mumbai-400021

Tel: 022 - 66107434 (D), 022-66107430 (Board)

Cell:+91 9920061236

Email: [cirpttu@gmail.com](mailto:cirpttu@gmail.com) , [anuj19603@yahoo.co.in](mailto:anuj19603@yahoo.co.in) [www.headwayip.com](http://www.headwayip.com)

Dear Sir,

1.0 Having examined the Tender documents consisting of the Tender notice, General Instructions to Tenderers, General Conditions of Contract, Special Conditions of Contract, specifications, plans, scope of work Time Schedules, Form of Contract , form of tender, form of schedule Rates, Bill of Quantities etc., and having understood the provisions of the said tender documents and also having thoroughly studied the requirements of TTUPL, related to the work tendered for in connection with the Execution of **RESURFACING AND MAINTENANCE WORKS OF UJJAIN – NAGDA ROAD (SH-17) SECTION -1 (PART OF UJJAIN-JAORA ROAD)**

**PROVIDING OF BITUMINOUS CONCRETE INCLUDING CLEANING OF OF ROAD SURFACE AND APPLYING TACK COAT FOR RESURFACING WORKS, REPAIR OF SUB BASE IF ANY REQUIRED, BERM FILLING ON BOTH SIDE AND CENTRE/EDGE LINE MARKING WITH THERMOPLASTIC PAINT** and having conducted a thorough study of the job site involved, the site conditions, power, water, material and equipment availability, the transport and communication facility and the availability and suitability of borrow areas etc., we hereby submit our tender offer for the performance of proposed work in accordance with the terms and conditions and within the time mentioned in the tender documents at the rates included within the tender documents and based on application of the rates tendered in the accompanying schedule of rates to the relative quantities indicated in the form of schedule rates forming part of the tender documents.

2.0 If the work or any part thereof is awarded to me/us, I/we undertake to perform the work in accordance with the contract documents as defined in the form of contract forming part of the tender documents and accept the terms and conditions of contract as laid down therein and undertake that on receipt of acceptance of tender and on confirmation. I/We will deposit such sums as may be necessary under the terms of contract and abide by the terms of the tender. I/We will also sign the necessary contract and other documents to commence the work and execute the work as per the terms and conditions contained in the tender documents failing which TTUPL shall be at

(Signature of Contractor with

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Accepting

liberty, without further reference to me/us and without prejudice to any of its rights to terminate the contract and or to forfeit the earnest money deposit and take further course of action.

3.0 I/We further undertake to keep our tender offer open for a period of not less than 90 days from the due date of submission of the tenders as specified in the General Instructions to tenderer forming part of the tender documents. `

4.0 I/We hereby undertake that the statements made herein/information above are true in all respects and that in the event of any such statement or information being found to be incorrect in particular, the same may be construed to be a misrepresentation entitling TTUPL to avoid any resultant contract and take further action as may be justified. I/We confirm having deposited EMD of Rs. 7,74,000.00 in the form of DD no:        dtd        Bank:

Yours faithfully,

Signature of the tenderer Name and  
designation of the

Authorized person signing the Tender on behalf of  
the Tenderer.

Name: Designation. Address.

Witness :

**VOL – II**

**GENERAL CONDITIONS OF  
CONTRACT (GCC)**



## **GENERAL CONDITIONS OF CONTRACT (GCC)**

### **A: GENERAL**

#### **1.0 Definitions**

1.1 In this contract, the following terms shall be interpreted as indicated:

- a) “The Contract” means the agreement entered into between the TTUPL and the Contractor, as recorded in the contract form signed by the parties, including all the attachments and appendices there to and all documents incorporated by reference therein.
- b) “The Contract Value” means the amount payable to the Contractor under the contract for the full and proper performance of its contractual obligations.
- c) “Contract Data” means any information provided in the Tender document and agreed to by the Contractor.
- d) “The Work” means all labor, materials, tools and plant, equipment including government taxes and transport, that may be required in preparation of and for and in the full and entire execution and completion of “the Work”.
- e) “Services” means services ancillary to the execution of the work such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training and other obligations of the Contractor covered under the contract.
- f) “GCC” means the General Conditions of Contract contained in this section.
- g) “SCC” means the Special Conditions of Contract.
- h) “The TTUPL (Topworth Tollways (Ujjain) Pvt. Ltd.)” means the organization getting the work done, and or its representative
- i) “The Contractor” means the individual or the firm executing the work.
- j) “The Project Site” where applicable, means the place or places named in SCC.
- k) “Day” means calendar day.

#### **2.0 Interpretation and Application**

2.1 These general conditions shall apply to the extent that provisions in other parts of the contract do not supersede them.

2.1 In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The TTUPL will provide instructions clarifying queries about the Conditions of Contract.

2.3 If sectional completion is specified in the Contract Data, references in the Conditions of Contract to the Works, the Completion Date, and the Intended completion date are for the whole of the Works.

### **3.0 Standards**

3.1 The works executed by the Contractor should be carried out in most professional manner, both as regards material and otherwise, in every respect, in strict accordance with the Technical Specifications. All materials and workmanship shall so far as procurable be of the respective kinds described in the priced schedule of quantities and/or specifications and in accordance with the TTUPL instructions, and the Contractor shall upon the request of the TTUPL, furnish them with all invoices, accounts; receipts and other vouchers to prove that the material procured complies therewith. When no applicable standard exist, the work shall be carried out as per the directions of the TTUPL. The Contractor shall at his own cost arrange for and / or carry out any test of materials which the TTUPL may require. In case of discrepancies in tender wording as regards the specifications of materials workmanship etc., written instructions will supersede the tender wording unless otherwise mentioned.

3.2 The TTUPL in their absolute discretion from time to time shall issue further written instructions, details, directions and explanations which are hereafter collectively referred to as “the TTUPL instructions” in regard to:

- a) The variation or modification of the design quality or quantity of works or the addition or omission on any work.
- b) Any discrepancy in the drawings or between the schedule of quantities and / or drawings and /or specifications/ dimensions etc.
- c) The removal and / or re-execution of any works executed by the Contractor.
- d) The removal from the site of any materials brought thereon by the Contractor and the substitution of any other materials therefore / or rejection of the material brought on site.

### **4.0 Use of Contract Documents and Information**

4.1 The Contractor shall not, without the TTUPL prior written consent, disclose the contract or any provision thereof, or any specifications, plan, drawing, pattern, sample or information furnished by or on behalf of the TTUPL in connection therewith, to any person other than a person employed by the Contractor in performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far, as may be necessary for purposes of such performance.

4.2 The Contractor shall not, without the TTUPL prior written consent make use of any document or information enumerated in Para 5.1 except for the purposes of performing the contract.

4.3 All documents included but not limited to contract agreement shall remain the property of the TTUPL and shall be returned (in all copies) to the TTUPL on completion of the Contractor's performance under the contract, if so required by the TTUPL.

## **5.0 Performance Guarantee**

5.1 Within 5 days from the date of PO / WO of the contract, the Contractor shall furnish performance guarantee in the form of a bank guarantee to the TTUPL, of the amount specified in the Special Conditions of Contract / General instructions/Schedule of fiscal aspects . The proceeds of the performance guarantee shall be payable to the TTUPL as compensation for any loss or dues resulting from the Contractor's failure to complete its obligations under the contract.

- i) If contractor failure to submit the performance guarantee within specified time limit, his tender will be considered as deemed terminated
- ii) If Contractors fails to perform execution as per program schedule submitted and delay occurs more than 30 days cure period after scheduled completion date

5.2 The performance guarantee shall be in the form of BG from nationalized bank.

5.3 The performance guarantee shall be discharged by the TTUPL and returned to the Contractor after six months on completion of the work and recording of the completion certificate.

5.4 5% of the contract / approved tender value in the form of BG valid for period till Two year from the date of completion of work from nationalized bank as per TTUPL approved format.

## **6.0 Program and Reporting**

6.1 The contractor shall furnish to the TTUPL a bar chart laying down weekly targets to complete the project within stipulated time for approval within fifteen days from the date of receipt of notification of PO/WO. Weekly progress report shall be furnished to the TTUPL confirming the progress.

6.2 The contractor must submit every week the following information to the TTUPL in writing:

- I. Number of men / machinery deployed
- II. Progress achieved.
- III. Expected dates for completion of work.
- IV. Any actual or potential delay in program caused by the action or inaction of L P A I and other contractors working on site.

## **7.0 Assignment and Sub-contracting**

7.1 The whole of the works included in the Contract shall be executed by the contractor and the contractor shall not directly or indirectly transfer, assign or underlet the contract or any part, share or interest therein without the written consent of the TTUPL.

7.2 No sub-contracting shall relieve the Contractor from the full and entire responsibility of the Contract or from the active superintendence of the work during their progress.

#### **8.0 Contractor to provide everything necessary for proper execution of work**

8.1 The Contractor shall provide everything necessary for the proper execution of the works according to the intent and meaning of the drawings, priced schedule of quantities and specifications taken together whether the same may or may not be particularly shown or described therein provided that the same can reasonably be inferred there from. If the Contractor finds any discrepancy therein he shall immediately and in writing refer the same to the TTUPL whose decision shall be final and binding. Further, if any sample(s) of material(s), fittings, fixtures or finished item(s), to be used in the works, has/have been called for from the contractor, no work related to it/these shall be executed unless the same has/ have been approved by the TTUPL failing which no payment shall be made to the contractor on this account. Any sample, duly approved by the TTUPL shall become part of the supply to be used in "the works".

8.2 The Contractor shall supply fix and maintain at his cost, during the execution of any works, all the necessary power supply, water supply, scaffolding, watching and lighting by night as well as by day, required not only for the proper execution but also for protection of the public and the safety of any adjacent roads, streets, pavements, walls houses, building and other erections, matters or things.

8.3 Throughout the execution of the work, the Contractor or his representative duly authorized and fully responsible and technically conversant with the work under this agreement, acting on his behalf shall be available at the site for supervising the work. The Contractor shall make adequate arrangements for watchmen to guard the materials brought by them to the site and shall ensure the safety, breakage and any theft of materials fixed or unfixed by him. Any material, T & P brought to the site for bonafide use of the Project shall not be removed/ shifted from the site without the prior written permission of the TTUPL.

8.3 Contractor shall provide drawings /details / work program before execution of work and get them approved by the TTUPL.

8.4 Wherever the specifications of any item indicate the usage of approved equivalent of any material, the Contractor shall get the sample of the equivalent material approved from the TTUPL before execution. The approval of the equivalent material is entirely at the discretion of the TTUPL.

**9.0 Site Establishment:** The contractor shall provide all stores, workmen and materials. All materials likely to deteriorate in the open shall be stored under suitable cover.

- 9.1 The contractor shall not be allowed to construct huts for accommodation of his employee or workmen, within the site area. The contractors employees or workmen will not be allowed to stay overnight at the site area.
- 9.2 The security of the contractor's equipment and materials is his own responsibility. The TTUPL accepts no liability for loss or damage to the contractor's plant, tools and tackles & materials.
- 9.3 The materials issued to the contractor by the TTUPL will remain under the custody of contractor as a trustee. However, title on the same will remain with the TTUPL. The contractor will be responsible for loss or damage to such materials and shall preserve them in good working conditions as required for the contract and good execution practices till such time that they are incorporated in the works and erected, aligned and fully installed in position and handed over to the TTUPL. In case the TTUPL feels that arrangements made by the contractor are not adequate he shall so advice the contractor and the contractor shall promptly take corrective action. In case the contractor fails to take corrective action, TTUPL shall take such corrective actions and recover the cost thereof from the contractor's bills. Accounts of such material on completion of work shall be rendered and surplus material returned to the TTUPL as per instructions of TTUPL.
- 9.4 The contractor shall clear away periodically or as instructed by TTUPL any rubbish, scrap materials, etc. and dump the same in the authorized dump sites notified by local authority or area indicated by the TTUPL. All construction materials shall be neatly stacked in an orderly manner as directed by the TTUPL and care shall be taken to allow proper access to workmen and easy movement of men, vehicles, cranes and materials.
- 9.5 The contractor shall not permit the entry to the site of any person not directly connected/concerned with the work without first having obtained the written permission of TTUPL.
- 9.6 The contractor shall submit a list of equipment, tools, tackles, etc. which he will use, to perform the work. These tools, etc. shall not be removed from the site till the completion of job. A gate pass must be obtained from the TTUPL representative in order to remove from site any testing equipment, tools and materials.
- 9.7 All items such as instructions and other pertinent data regarding erection/ commissioning and maintenance should be typed and classified for transmittal in a manner approved by the TTUPL.
- 9.8 All employees of the contractor shall conform to rules of conduct, etc. established; failure to do so will be sufficient cause for removal of such person from the site.
- 9.9 For storage of materials, contractor has to provide at his own cost sufficient fenced and covered appropriate area on site for storage of above materials with lock and key arrangement. For arranging meetings suitable sized table and chairs shall be provided by Contractor.
- 9.10 Contractor to provide required quantity of potable water for his workers and staff.

## **10.0 Messing & Accommodation**

10.1 The contractor will make his own arrangements for messing and accommodation and the same shall not be done at site. No accommodation and messing shall be provided by the TTUPL.

## **11.0 Procurement, Consumption and Storage of Materials**

11.1 The contractor shall at his own expenses, provide all materials required for the works. Adequate stocks of all materials required for the work are to be maintained at site. No material (unless as provided elsewhere in this document) shall be supplied by the TTUPL.

11.2 All materials to be provided by the contractor shall be in conformity with the detailed specifications laid down in the contract and the contractor shall, if requested by the TTUPL furnish prior to the satisfaction of the TTUPL that the materials confirm to the laid down specifications.

11.3 All sources of materials required for execution of work must be got approved by the TTUPL before they are actually put to use.

11.4 The contractor shall, at his own expenses and without delay, supply to the TTUPL samples of materials proposed to be used in the work. The TTUPL shall within seven days of supply of samples, or within such further period as TTUPL may require intimate the contractor in writing, whether samples are approved by TTUPL, or not. If samples are not approved, the contractor shall forth with arrange to supply, for their approval, fresh samples complying with the specification laid down in the contract.

11.5 The TTUPL shall have full power to require removal of any or all the materials brought to site by the contractor which are not in accordance with the contract specifications or do not confirm in character or quality to the samples approved by TTUPL. In case of default on the part of the contractor in removing rejected materials, the TTUPL shall be at liberty to have them removed by other means. The TTUPL shall have full powers to direct proper materials to be substituted for rejected materials and in the event of the contractor refusing to comply. TTUPL may cause the same to be supplied by other means. All risks and costs which may attend upon such removal and/or substitution shall be borne by the contractor.

11.6 Contractor shall be responsible for procurement of all materials/ equipment etc. delay due to non-availability of any material equipment will be not be entertained by TTUPL

## **12.0 Method of storing the materials**

12.1 The contractor shall at his own cost, provide for all necessary storage on the site in specified areas for all materials which are likely to deteriorate by the action of sun, wind, rain, dampness or other natural causes due to exposure in the compounds or in stores in such a manner that all materials, tools and tackles etc. shall be duly protected from damage by weather or any other cause.

12.2 Materials required for the works, by the contractor be stored by the contractor only at places approved by the TTUPL. Storage and safe custody of materials shall be the responsibility of the contractor.

12.3 All the materials including contractor's tools & tackles, testing & erection equipment brought by the contractor to the site shall become and remain the property of the TTUPL and shall not be removed off the site without prior written approval of the TTUPL. But whenever the works are finally completed and advances, if any, in respect of such items are fully recovered, the contractor shall at his own expenses forthwith remove from the site all surplus items supplied by him and upon such removal, the same shall revert in and become the property of the contractor.

### **13.0 Scaffolding Materials**

13.1 It shall be desirable to have adequate amount of scaffolding materials to complete the work speedily and TTUPL decision as to the quantum of these desirable resources at site shall be final and binding.

### **14.0 Completion of Work**

14.1 Before finally leaving site, all the Contractors stores, tools & tackles, equipment's and rubbish / Debris / waste materials shall be removed and the site left clean and tidy. The space allocated by TTUPL shall be vacated and handed over to the TTUPL.

### **15.0 Water and Electricity for Construction work**

15.1 Contractor has to make his own arrangement for supply of water / power. At no point of time the execution activity should stop or slow down due to non availability of water / power.

### **16.0 Employment of Labor**

16.1 The contractor shall comply with the requirement of statutory provisions and shall be solely responsible for fulfillment of all legal obligations under Contract Labor (reg. & abolition) Act, Inter State Migrant Workmen Registration of Employment and condition of Service Act, payment of Wages Act., Minimum Wages Act, Workmen's Compensation act, Employee's Provident Fund & Miscellaneous Provisions Act, Payment of Bonus Act, Payment of Gratuity Act, Industrial Disputes Act and all other Industrial/Labor enactments and Rules made there under as applicable from time to time. In case TTUPL incurs any liability towards payment of any dues, compensation, cost of any other liability of any kind whatsoever, due to non fulfillment of statutory provisions under any industrial/labor laws by the contractor, the same shall be made good by the contractor and TTUPL shall have full right to recover and claim the same against the contractor from his outstanding bills or otherwise. No Labor to stay at site.

16.2 The contractor will be expected to employ on the work only his regular skilled employees with experience of this particular work. Permission of the TTUPL must be

obtained before tradesmen are recruited locally for the work. This rule does not apply to unskilled labor. No female labor shall be employed in dark hours/ i.e. hours prohibited under the applicable law. No person below the age of eighteen years shall be employed at any point of time. The contractor shall pay, to each person, the wages as per minimum Wages Act of the State Government.

16.3 All traveling expenses including provision of all necessary transport to and fro, lodging allowances and other payments to the contractor's employees are his own responsibility.

16.4 The hours of work at the site shall be decided by the TTUPL and contractor shall adhere to the same.

16.5 All contractors' employees shall wear safety shoes, helmet, goggles, hand gloves, nose masks and any other required personal protection equipment such identifications marks as may be provided by contractor on work site and duly approved by TTUPL.

16.6 All notices displayed on the site and any instructions issued by the TTUPL shall be strictly adhered to by the Contractor's and/or his sub-contractor's employees.

16.7 The contractor shall be required to maintain employment records as covered in relevant Acts and produce documentary evidence to the effect that he has discharged his obligations under the Employees Provident Fund Act 1952 and ESI Act, 1948, Group Insurance and other Acts for the workmen working at site towards safety, statutory regulations and insurance aspects applicable as per latest government (central & state) acts wherever applicable.

## **17.0 Working and Safety Regulations**

17.1 The contractor shall observe all statutory, safety, and legal requirements / regulations issued by Central and State Governments applicable to the work as well as any local regulations applicable to the site.

17.2 The contractor has to fulfill the safety obligations at site and ensure that all safety equipment required for the execution of the work is available and used by the workmen at site.

17.3 Required safety signage and other requirement as per safety norms must be compiled as per the instructions of the TTUPL.

17.4 A qualified person in charge of safety should be posted at the site by the contractor to take care of the safety related issues during the execution period with regard to workmen and material. Failure to employ the safety person will invite suitable deductions from the bills.

17.5 The contractor shall be responsible for the provision of all safety notices safety equipments including the safety gadgets for his workmen required by both the relevant legislation and such as the TTUPL may deem necessary. While working at heights, safety belts, nets, and safety helmets shall necessarily be used.

**18.0 Particular attention is drawn to the following:** In case of accident, the TTUPL shall be informed in writing forth with and First-Aid, Hospitalization shall be provided



by the Contractor. The contractor shall strictly follow regulations laid down by Govt. and State authorities in this regard and all cases are to be defended By the Contractor. The TTUPL shall not entertain any insurance claims.

18.1 Contractor shall fence his site area, excavations and etc.

18.2 Compliance with all electricity regulations should be ensured.

18.3 Compliance with statutory requirements for inspection and test of all lifting appliances and auxiliary lifting gear is to be ensured.

18.4 Staircase, doors or gangways shall not be obstructed in any way that will interfere with means of access of escape.

18.5 Where it is necessary to provide and/or store petroleum products or petroleum mixtures and explosive, the contractor shall be responsible for carrying out such provision and/or storage in accordance with the rules and regulation laid down in Petroleum Act 1934 Explosive Act 1948 and Petroleum and Carbide of Calcium Manual Published by the Chief Inspector of Explosive of India. All such storage shall have prior approvals of the TTUPL. In case any approval or clearance from Chief Inspector of Explosive or any statutory authorities is required, the contractor shall be responsible for obtaining the same.

18.6 The contractor shall have his own Fire Fighting Extinguishers and Equipment.

## **19.0 Contractor's Risks**

19.1 All risks of loss or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract are the responsibility of the Contractor.

19.2 The Contractor shall be responsible for injury to persons if any, animals or things and for all damages to the structural and/or decorative part of property which may arise from the operations or neglect of himself or of any sub-contractor or of any of his or sub-Contractor's employees whether such injury or damage arises from carelessness accident or any other causes whatsoever in any way connected with the carrying out of the Contract. This clause shall be held to include inter alia any damage to buildings, whether immediately adjacent or otherwise and any damage to roads, footpaths, or ways as well as all damage caused to the buildings and the work forming the subject to this Contract by frost, rain or other inclemency of the weather. The Contractor shall indemnify the TTUPL and hold him harmless in respect of all and any expenses arising from any such injury or damage to persons or property as aforesaid and also in respect of any claim made in respect of injury or damage under any acts of Government or otherwise and also in respect of an award of compensation or damages consequent upon such claim. The contractor shall make good all damages of every sort mentioned in the Clause, as to deliver up the whole of the Contract works complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damage to the property of third parties.

## **20.0 Insurance**

20.1 The Contractor shall provide, in the joint names of the TTUPL and the Contractor, Insurance cover from the Start Date to the completion of work and handing

over to the TTUPL for the amounts and deductibles stated in the Contracted Amount for the following events which are due to the Contractor's risks and shall be covered under respective policies as under:

- a) Contractor's All Risk Policy.
- b) Third Party Insurance for four consecutive occurrences, the minimum cover for occurrence is Rs. 5.0 lakh. Contractor will pay additional premium after each occurrence to make insurance valid for four occurrences always.

20.2 The contractor shall provide workmen compensation policy, obtained in his name.

20.3 Policies and certificates for insurance shall be delivered by the Contractor to the TTUPL for the TTUPL approvals before the Date of Start of work i.e., date of execution of the contract. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.

20.4 If the Contractor does not provide any of the policies and certificates required, the TTUPL may affect the insurance which the Contractor should have provided and recover the premiums the TTUPL has paid, from the contractor bills. Otherwise due to the Contractor or if no payment is due, the payment of the premiums shall be a debt due. The cost of premium will be deducted from the contractor's bill, if at any time the work remains uninsured.

20.5 Alterations to the terms of the insurance shall not be made without the approval of the TTUPL.

20.6 Both parties shall comply with the conditions in the insurance policy.

20.7 All policies in original shall be submitted to the TTUPL before the release of the 1<sup>st</sup> bill.

#### **21.0 Contractor to remove all scrap / unwanted material etc immediately**

21.1 All debris, packing materials or other matter shall be at once carted away by the contractor out of the premises/ site intimating the concerned authorities. Any material brought on site if found unsuitable / surplus shall be removed from site at once by the Contractor intimating the concerned authorities.

#### **22.0 Inspections by TTUPL/ MPRDC / IE**

22.1 The representative of the TTUPL / MPRDC / IE at all times have free access to the works and/or to the workshops, factories or other places where materials are being prepared or executed for the Contract and also to any place where materials are lying or from which they are being obtained. No person except the representatives of Public authorities shall be allowed on the work at any time without the written permission of the TTUPL. If any work is to be done at a place other than the site of the works, the Contractor shall obtain written permission of the TTUPL for doing so.

22.2 The TTUPL / MPRDC / IE and their representatives shall have the right to test and/ or inspect the works to confirm their conformity to the contract, at all times, whenever in progress either on the site on the Contractor's premises wherever situated or any firm or company where work in connection with this contract may be in hand. All records,

registers or documents relating to the works including materials used on works shall be kept open to the inspection of the TTUPL or his Authorized representative.

22.3 The Contractor shall get the quality of work done inspected for material and workmanship at different stages of execution as per instructions given by the TTUPL or their representative from time to time. Any item of work done which is found not conforming to the Contract shall be rejected by the TTUPL / MPRDC / IE. The decision of the TTUPL in such cases shall be final.

22.4 The inspections and tests may be conducted on the premises of the Contractor or at the Project site. When carried out on the premises of the Contractor or its sub-Contractor(s), all reasonable facilities and assistance including access to drawings and production data shall be furnished to the inspectors at no charge to the TTUPL / MPRDC / IE

22.5 Should any inspected items of work fail to conform to the specifications, the TTUPL shall communicate them and the Contractor shall either replace them or make all alterations necessary to meet specification requirements free of cost to the TTUPL.

22.6 The Contractor shall offer the Engineer or any representative of TTUPL / MPRDC / IE every facility and assistance for examining the works and materials. The Engineer or any representative of the TTUPL shall have power to give notice to the Contractor or to his staff, of non-approval of any work or materials and such work shall be suspended or the use of such materials shall be discontinued until the decision of the TTUPL. Such examinations shall not in any way exonerate the contractor from the obligations to remedy any defects which may be found to exist at any stage of the work or after the same is completed.

### **23.0 Claims for Extra or for Deviations**

23.1 The TTUPL shall not be responsible for the payment of any claim for extra work not included in the contract nor the Contractor shall be entitled to claim any addition to the contract sum in respect of any changes or alterations in the materials used unless the same shall have been ordered or sanctioned, as the case may be, in writing by the TTUPL.

### **24.0 Removal of Imperfect Work**

24.1 If, it shall appear that the work has been executed with unsound, imperfect or unskilled workmanship, or with material of any imperfect or any inferior quality or otherwise not in accordance with the contract document, the Contractor shall at his own cost rectify, reform, remove, or reconstruct the same, either in the whole or in part, as may be directed by the TTUPL, whether or not the value of any such work or materials shall have been included in any payment made to the Contractor.

**24.2 The Contractor shall remove all debris etc., clean the roads/site and hand over the site quite clean on completion of the work to the satisfaction of the TTUPL.**

## **25.0 Delay in the Contractor's performance**

25.1 Execution of the work and performance of the services shall be done by the Contractor in accordance with the time schedule specified by the TTUPL in the Notice for Invitation of Tenders.

25.2 If, at any time during performance of the contract, the Contractor should encounter conditions impeding timely execution of the works and performance of services, the Contractor shall promptly notify TTUPL in writing of the fact of the delay, its likely duration and its cause(s). As soon as possible, after receipt of the Contractor's notice, the TTUPL shall evaluate the situation and may, entirely at its discretion, extend the Contractor's time for performance with or without liquidated damages.

## **26.0 Liquidated Damages**

26.1 If the Contractor fails to execute any or all of the works or to perform the services within the period(s) specified in the contract, the TTUPL shall deduct from the contract value, as liquidated damages, a sum specified in the SCC for each week or part thereof delay until actual completion or performance, up to a maximum deduction of the percentage specified in SCC. Once the maximum is reached, the TTUPL may consider termination of the contract. The pro-rata progress envisaged and expected from the contractor shall be maintained, time being the essence of the contract.

## **27.0 Force Majeure**

27.1 The Contractor shall not be liable for forfeiture of its performance security, liquidated damages or termination by default, if and to the extent that, its delay in performance or other failure to perform its obligations under the contract is the result of an event of Force Majeure.

27.2 For purposes of this clause, "Force Majeure" means an unforeseeable event beyond the control of the Contractor and is not because of the Contractor's fault or negligence. Such events may include acts of the TTUPL either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics.

27.3 If a Force Majeure situation arises, the Contractor shall promptly notify the TTUPL in writing of such conditions and the cause thereof. Unless otherwise directed by the TTUPL in writing, the Contractor shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

## **28.0 Termination by Default**

28.1 The TTUPL may without prejudice to any other right or remedy by a written notice (of Fifteen days) of default sent to the Contractor, terminate the contract in whole or part:

a) If the Contractor fails to complete any or all of the works within the period(s) specified in the NIT or any amendment thereof, or within any extension thereof granted by the TTUPL, or

b) If the Contractor fails to perform any other obligation(s) under the contract, 28.2 In the event, the TTUPL terminates the contract in whole or in part, the TTUPL may procure, upon such items and in such manner as it deems appropriate, works or services similar to those unexecuted and the Contractor shall be liable to the TTUPL for any excess costs for such similar work or services. However, the Contractor shall continue the performance of the contract to the extent not terminated.

c) At any stage of work if contractor abundant the work for any reason which is not attributed to TTUPL, TTUPL has reserve right to terminate contractor, and TTUPL will be free to execute the balance work will by another agency at the risk and cost of contractor, **under such situation the PBG submitted by Contractor will be forfeited and the payment of executed work will be kept on hold till the completion of work by another deployed agency.**

d) If Contractor abundant the work for any reason which is not attributed to TTUPL, and if any fault found in the executed work by contractor, TTUPL will get rectify the faulty work by deployed another agency at the risk and cost of contractor,

## **29.0 Termination for Insolvency**

29.1 The TTUPL may at any time terminate the contract by giving written Fifteen days' notice to the Contractor, if the Contractor becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Contractor, provided such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the TTUPL.

## **30.0 Termination for Convenience**

30.1 The TTUPL, by written notice of Fifteen days sent to the Contractor, may terminate the contract, in whole or in part, at any time for its convenience. The notice shall specify that the termination is for TTUPL convenience, the extent to which performance of the Contractor under the contract is terminated, and the date upon which such termination becomes effective. The items of work those are complete and ready after the Contractor's receipt of notice of termination shall be accepted, if completed within the notice period, by the TTUPL at the contract terms and values. For the remaining works, the TTUPL may elect.

a) To have any portion completed at the contract terms and value and/or

b) To cancel the remainder and pay to the Contractor an amount, finalized by the TTUPL, for partially completed works and for materials and parts previously procured by the Contractor.

c) The contractor shall obtain written permission from the TTUPL to complete the incomplete items of work during the notice period.

## **31.0 Resolution of Disputes**

31.1 The TTUPL and the Contractor shall make every effort to resolve amicably by direct informal negotiations any disagreement or dispute arising between them under or in connection with the contract. If, after thirty (30) days from the commencement of such

informal negotiations, the TTUPL and the Contractor have been unable to resolve amicably a contract dispute, either party may require that the dispute be referred for resolutions to the formal mechanisms specified in the SCC. These mechanisms may include but are not limited to, Arbitration in accordance with rules of Arbitration Act and award made in pursuance thereof shall be binding on both the parties.

### **31.2 In case the Contractor is a Public Sector Enterprise or a Government**

**Department,** the dispute shall be referred for resolution in Permanent Machinery for Arbitration (PMA) of the Department of Public Enterprise, Government of India. Such dispute or difference shall be referred by either party for Arbitration to the sole Arbitrator in the Department of Public Enterprises to be nominated by the Secretary to the Government of India in-charge of the Department of Public Enterprises. The award of the Arbitrator shall be binding upon the parties to the dispute, provided, however, any party aggrieved by such award may make a further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law & Justice, Government of India. Upon such reference the dispute shall be decided by the Law Secretary or the Special Secretary / Additional Secretary, when so authorized by the Law Secretary, whose decision shall bind the Parties finally and conclusive. The Parties to the dispute will share equally the cost of arbitration as intimated by the Arbitrator.

## **32.0 Governing law**

32.1 The contract shall be governed by the laws of The Govt. of India for the time being in force. All disputes arising out of or in any way connected with this agreement shall be deemed to have arisen in New Delhi and only the courts in Mumbai alone shall have exclusive jurisdiction to determine the same.

## **33.0 Notices**

33.1 Any notice given by one party to the other pursuant to this contract shall be sent to other party in writing to the other party's address specified in SCC. A notice shall be effective on the date on which it is delivered, or on the notice's effective date, whichever is later.

## **34.0 Dismissal of workmen**

34.1 The contractor on request from the TTUPL, immediately dismiss from the works any person employed by him who may be found in the opinion of the TTUPL to be unsuitable or incompetent or who has shown misconduct.

## **35.0 Working Hours**

35.1 Normal working hours shall be from 9.00 a.m. to 6.00 p.m. Any works of important nature should not be carried out on Sundays, Holidays and during nights. However permission to work beyond normal working hours can be granted by the TTUPL in exceptional circumstances to achieve the target schedule of completion.

## **TIME CONTROL**

### **36.0 Programme**

36.2 An update of the Program shall be a program showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work including any changes to the sequence of the activities.

36.4 The TTUPL approval of the Program shall not alter the Contractor's obligations. The Contractor may revise the Program and submit it to the TTUPL again at any time. A revised Program is to show the effect of Variations.

### 37.0 Delay and Extension of time

(a) by force majeure **or**  
(b) by reason of any exceptionally inclement weather **or**  
(c) by reasons of TTUPL instruction **or**  
(d) in consequence of the contractor not having received in due time necessary instructions from the TTUPL for which he shall have specially applied in writing **or**  
(e) from other cause which the TTUPL may certify as beyond the control of the contractor the contractor shall request for approval by the TTUPL a fair and reasonable extension of time for completion of the Contract works. In case of strike or lockout the contractor shall as soon as may be given written notice thereof to the TTUPL, but the contractor shall nevertheless constantly use his endeavors to prevent delay and shall do all that may reasonably be required to the satisfaction of TTUPL to proceed with the work.

39.0 The contractor shall maintain a site order book at site for the purpose of quick communication between the contractor and TTUPL. Any communication relating to the work may be conveyed through site order book. Such a communication from one party

to other shall be deemed to have been adequately served in terms of contract. Each site order book shall have machine numbered pages in triplicate, and shall be carefully maintained and preserved by the contractor, and shall be made available to the TTUPL as and when demanded. Any instructions which the TTUPL may like to issue to the contractor or the contractor may like to bring to the TTUPL two copies of such instructions shall be taken from the site order book and will be handed over to the TTUPL and the third copy will be retained with contractor.

#### **40.0 Infrastructure**

40.1 For storage of materials, contractor has to provide at his own cost sufficient fenced and covered appropriate area on site for storage of above materials with lock and key arrangement.

40.2 Contractor to provide required quantity of portable water for his workers and staff.

#### **41.0 Governing language**

41.1 The contract shall be written in English language. All correspondence and other documents pertaining to the contract that are exchanged by the parties shall be written in the same language.



## **C. QUALITY CONTROL**

### **42.0 Identifying Defects**

42.1 The TTUPL / MPRDC / IE shall check the Contractor's work and notify the Contractor of any defects that are found. Such checking shall not affect the Contractor's responsibilities. The TTUPL / MPRDC / IE may instruct the Contractor to search for a defect and to uncover and test any work that the TTUPL consider may have a defect.

### **43.0 Correction of Defects**

43.1 The TTUPL shall give notice to the Contractor of any defects before the end of defects liability period, which begins at Completion and is defined in the Contract Data. The defects liability period shall be extended for as long as defects remain to be corrected.

43.2 Every time notice of defect is given, the Contractor shall correct the notified Defect within the length of time specified by the TTUPL notice.

### **44.0 Uncorrected Defects**

44.1 If the Contractor has not corrected a defect within the time specified in the TTUPL notice, the TTUPL will assess the cost of having the defect corrected, and the TTUPL will realize the cost of rectification from the contractor's bill.

### **45.0 Maintenance of Registers:**

45.1 The contractor shall maintain the following registers at site of work and should produce the same for inspection by TTUPL whenever desired by them. The contractor shall also maintain the records/registers as required by the local authorities.

- i. Registers for the Bitumen, Cement etc
- ii. Registers for Metal, chips, sand, etc.
- iii. Registers for onsite testing report details.
- iv. Site order book (triplicate).
- v. Daily progress report.
- vi. Register for the Vehicles/equipment/plants etc.

### **46.0 Schedule of Quantities:**

a) The Schedule of Quantities is used to calculate the Contract Price. The Contractor is paid for the quantity of the work done at the rate in the priced Schedule of Quantities.

b) The quantities considered in tender document are tentative, it may vary any extent, no price variation will be entertained for variation in quantities

### **47.0 No escalation shall be payable on any account.**

## **D: FINISHING THE CONTRACT**

### **48.0 Completion Certificate**

48.1 The Contractor shall request the TTUPL to issue a Certificate of Completion of the Works and the TTUPL will do so upon deciding that the Work is completed.

### **49.0 Taking Over**

49.1 The TTUPL shall take over the Site and the Works after Completion, subject to satisfaction of TTUPL in regard to completion of work. Before handing over the site, the contractor must obtain a site clearance certificate from the TTUPL.

### **50.0 No Claim Certificate**

50.1 No claim certificate shall be submitted by the Contractor as per TTUPL format along with the final bill (if the final bill is correct and complete).

50.2. Contractor shall have to submit no dues from concern Govt. Authorities, before submission of Bill

### **51.0 Taxes**

51.1 Taxes to be deducted at source and charges for GST will be issued to the contractor. The contractor will be required to deliver the cheque to the concerned authorities, and the acknowledgement is to be deposited with TTUPL.

51.2 GST will be paid extra for the billed amount, TTUPL will hold amount equal to value of GST from the bill, and same will be released with GST amount when contractor will produce GST paid Certificate

# VOL-III

## SPECIAL CONDITIONS OF CONTRACTS (SCC)

### SPECIAL CONDITIONS OF CONTRACT (SCC)

The following Special Conditions of Contract are supplementary, to the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions of Contract.

#### DEFINITION

(A) TTUPL (Topworth tollways (Ujjain) Pvt. Ltd.)

**Resolution Professional**  
**Topworth Tollways (Ujjain) Private Limited**  
**C/o Headway Resolution and Insolvency Services Pvt. Ltd.**  
708, Raheja Center, Nariman Point, Mumbai-400021  
Tel: 022 - 66107434 (D), 022-66107430 (Board)  
Cell:+91 9920061236

Email: [cirpttu@gmail.com](mailto:cirpttu@gmail.com) , [anuj19603@yahoo.co.in](mailto:anuj19603@yahoo.co.in)

Website : [www.headwaysip.com](http://www.headwaysip.com)

(B) Site means the project site –Ujjain Jaora Road

#### 2.0 PERFORMANCE GUARANTEE FOR EXECUTION OF CONTRACT

2.1 Within Fifteen days (15) from date of LOI / PO / WO, the Contractor shall furnish Performance Guarantee to the TTUPL amounting to 5 % of the accepted Tender Value in the form of Bank guarantee from nationalized bank. The (Earnest Money Deposit) EMD shall be returned on submission of the Performance Guarantee or will be adjusted in Performance Guarantee amount

**2.2 Release of Performance Guarantee for execution of contract:** 100%, six months after the completion date of work and issuance of completion certificate by the TTUPL.

2.3 An Agreement / PO / WO, will be executed after submission of Performance Guarantee as per TTUPL format.

#### 3.0 PAYMENTS

Following terms of payment shall be applicable –

**a.1 Security Deposit (SD) and Retention Money**

- a) 5% of the bill value shall be deducted from every bill. The amount of RM will be released within one month from the final bill submission against submission of bank guarantees for equivalent amount with validity period up to defect liability period (i.e, 24 months) plus two months. (i.e. 26 months from the project completion date).
- b) No Interest is payable on the Security Deposit.
- c) Amount equal to 1% will be deducted from Bill amount against quality, if contractor refuse to test the material used in work, 0.50% will be released after submission of required test results as per codal provision and balance 0.50% will be released after one month time of date of receipt of completion certificate

**3.2 Payment Terms – Payment Terms –**

- i) Contractor shall raise RFI for every work activity one day prior to the work execution
- ii) All RFI should be closed by contractor after execution of work activity and duly signed by TTUPL officials
- iii) Contactor shall submit RA bill along with duly closed and signed RFI along with measurement sheet and quality test results
- iv) The pricing schedule for interim payments will be drawn up and finalized mutually between Accepting Officer and the contractor after the acceptance of the contract. The decision of the Accepting Officer shall be final and binding. Accordingly, contractor prepares Running bills for interim payments for actual works executed on ground and as per clause 3.2.(i), (ii)

**I) Deduction: -**

- a) Statutory deductions like TDS, and if any as per GOI Rules shall be deducted.
- b) Adjustment of any excess / short payment made in the earlier bills, at the time of making payments.
- c) Electricity and Water charges will be recovered as per tender terms.
- d) Value of chargeable materials if any issued by the TTUPL.
- e) Any other recovery if due as per tender terms & conditions.
- f) 5 % of the bill value as Security Deposit.
- g) 1% Labort cess

**II) Documents: -**

- a) Computerized detailed measurements, Running Accounts Bills and Final Bill will be Prepared by contractor and submitted to TTUPL for verification and approval.
- b) TTUPL gate entry documents.

- c) Relevant test reports.
- d) Labor License (as per statutory requirements).
- e) EPF Code Registration number with RPFC.
- f) Insurance – Contractor's All Risk (CAR) Policy
- g) Workmen compensation policy, Proof for PF deduction and remittance.
- h) Third Party Liability Insurance for four consecutive occurrences each occurrence of 5.0 lakh.
- i) GST registration number.
- j) Indemnity Bond in standard pro forma to indemnify the TTUPL against all risks arising during the performance of the contract.
- k) Proof of deployment of project engineers.
- l) Challans / receipts of taxes paid to statutory authorities i.e., labor cess, GST
- m) A Certificate towards the effect that minimum Technical and Safety man power was employed for the work execution Certified by the TTUPL representative as per the Tender Clauses.
- n) Undertaking for compliance of all labor laws.

### **3.3 Payment of Final Bill**

The final bill complete in all respect shall be submitted by the contractor within 30 days from the completion of the work. The bill should be accompanied with the following documents.

#### **I) Deduction:-**

- a) Statutory deductions like T D S , if any shall be deducted TTUPL reserves the right to adjust any excess / short payment made in the earlier bills, at the time of making payments.
- b) 5% of the bill value as Security Deposit and Retention money
- c) Adjustment of any excess / short payment made in the earlier bills, at the time of making payments.
- d) Electricity and Water charges will be recovered as per tender terms. e) Value of chargeable materials if any issued by the TTUPL.
- f) Any other recovery if due as per tender terms & conditions.
- g) Labour Cess 1% amount from every Running Bill
- h) Against Quality 1% amount from every Running Bill

## **II) Document:-**

- a) Computerized detailed measurements, Running Accounts Bills and Final Bill will be Prepared by contractor and submitted to TTUPL for verification and approval.
- b) Bank guarantee for 5% of Work Order value valid up to defect liability period. + 2 Months
- c) Job completion certificate by TTUPL.
- d) No claim certificate on TTUPL prescribed proforma - if any deduction is to be made for short fall, TTUPL shall record the same in this document.
- e) Site clearance certificate by TTUPL.
- f) Indemnity certificate towards labor payment and all statutory payments.
- g) Copy of the insurance policy. (Workmen compensation act and contractors all risk policy).
- h) Statutory Compliance certificate towards payment of insurance, GST, labour cess, service tax and other taxes if any applicable.
- i) A compliance Certificate should be submitted towards deployment of Technical man power as per the relevant Tender Clauses.
- j) Valid Insurance – Contractor's All Risk (CAR) Policy for AMC personal.
- k) Valid Labor License (as per statutory requirements) for AMC personal.
- l) Valid Third Party Liability Insurance for four consecutive occurrences each occurrence of 5.0 lakh for TTUPL personal.
- m) Relevant test reports
- n) TTUPL gate entry documents if any.
- o) Undertaking for compliance of all labour laws.
- v) Valid Indemnity Bond in standard proforma indemnifies the TTUPL against all risks arising during the performance of the contract.
- w) Final acceptance certificate issued by TTUPL.
- x) all test certificates of material used in work as well as finish product of work as per Codal provision

**3.5 Defects Liability and Maintenance Period:** 24 calendar months from the date of Issue of Final completion certificate/Acceptance of work by TTUPL.

**3.6 Increase in cost:** Quoted prices are firm and no escalation charges on any account are allowed in this work. No claim will be entertained on this account in future.

### **3.7 Disallowance of payment:**

If payment has been made for any item but later on some defect is noticed, TTUPL is authorized to disallow payment of the subsequent bill till rectification / replacement of the item.

## **4.0 ESCALATION**

**No Escalation shall be paid on any account.**

## **5.0 LIQUIDATED DAMAGES**

2% per week of delay up to a maximum of 10% (Ten percent) of the Contract value from the stipulated date of completion.

## **6.0 NOTICES**

For the purpose of all notices, the following shall be the address of the TTUPL and the Contractor. TTUPL

### **Resolution Professional**

IBBI Regn: IBBI/PA-001/IP-P00311/2017-18/10575

**Topworth Tollways (Ujjain) Private Limited**

**C/o Headway Resolution and Insolvency Services Pvt. Ltd.**

708, Raheja Center, Nariman Point, Mumbai-400021

Tel: 022 - 66107434 (D), 022-66107430 (Board)

Cell:+91 9920061236

Email: [cirpttu@gmail.com](mailto:cirpttu@gmail.com) , [anuj19603@yahoo.co.in](mailto:anuj19603@yahoo.co.in)

Contractor: \_\_\_\_\_

(To be filled in at the time of Signing of the Contract)

## **7.0 LABOUR**

7.1 The Contractor shall make his own arrangements for the engagement of all staff and labor, local or other, and for their payment, housing, food, transport etc.

7.2 The Contractor shall, if required by the TTUPL deliver to the TTUPL a return in detail, in such form and at such intervals as the TTUPL may prescribe, showing the staff and the numbers of the several classes of labor from time to time employed by the Contractor on the Site and such other information as the TTUPL may require.

7.3 Compliance with labor regulation: During continuance of the contract, the Contractor and his sub Contractors shall abide at all times by all existing labor enactments and rules made there under, regulations, notifications and bye-laws of the State or Central Government or local authority and any other labor law (including rules), regulation by laws that may be passed or notifications that may be issued under any labor law in future either by the State or the Central Government or the local Authority. The Contractor shall keep the TTUPL indemnified in case any action is taken against the TTUPL by the competent authority on account of contravention of any of the provisions of any Acts or rules made there under, regulation or notifications including

amendments. If the TTUPL is caused to pay or reimburse, such amount as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules /regulations including amendments, if any, on the part of the Contractor, the TTUPL shall have the right to deduct from any money due to the Contractor including his amount of performance security. The TTUPL shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the TTUPL.

7.4 The employees of the Contractor and the Sub-Contractor in no case shall be treated as the employees of the TTUPL at any point of time.

7.5 No labor shall stay at site. Temporary storage space provision should be made by contractor.

7.6 The rates shall be complete in all respects i.e. inclusive of all taxes, Insurance charges nothing on any account shall be paid over the approved rate. GST will be paid extra

7.7 All specialized and specific jobs shall be carried out by approved agencies/vendors only.

7.8 The Contractor shall arrange temporary drinking water and sanitation facilities for his workmen.

#### **7.9 Fair Wage Clause**

I. The contractor shall pay not less than fair wages to laborers engaged by him on the work.

II. "Fair" wages means wages whether for time or piecework notified by the Government from time to time for the locality of work.

III. The contractor shall not-with-standing the revisions of any contract to the contrary cause to be paid to the labor directly engaged on the work including any labor engaged by the sub-contractor in connection with the said work, as if the laborers had been directly employed by him.

IV. In respect of labor directly or indirectly employed in the works for the purpose of the contractors part of the agreement the contractor shall comply with the rules and regulations on the maintenance of suitable records prescribed for this purpose from time to time by the Government. He shall maintain his accounts and vouchers on the payment of wages to the laborers to the satisfaction of the TTUPL.

V. The TTUPL shall have the right to call for such record as required to satisfy himself on the payment of fair wages to the laborers and shall have the right to deduct from the contract amount a suitable amount for making good the loss suffered if any by the worker or workers by reason of the "fair wages" clause to the workers.



VI. The contractor shall be primarily liable for all payments to be made and for the observance of the regulations framed by the Govt., from time to time without prejudice to his right to claim indemnity from his sub-contractors.

VII. As per contract labor (Regulation and abolition) Act.1970 the contractor has to produce the license obtained from the licensing officers of the labor department along with the tender viii. Any violation of the conditions above shall be deemed to be a breach of his contract.

VIII. Equal wages are to be paid for both men and women if the nature of work is same and similar.

IX. The contractor shall arrange for the recruitment of skilled and unskilled labor local and imported to the extent necessary to complete the work within the agreed period as directed by the TTUPL.

## **8.0 SAFETY MEASURES**

I. The contractor shall take necessary precautions for safety of the workers and preserving their health while working in such jobs, which require special protection and precautions. The following are some of the measures listed but they are not exhaustive and contractor shall add to and augment these precautions on his own initiative where necessary and shall comply with directions issued by the TTUPL or on his behalf from time to time and at all times.

II. Providing protective foot wear, Goggles, nose masks, electrical hand Gloves, helmet to the workers as per the site requirement.

III. Getting the workers in such jobs periodically examined for chest trouble due to too much breathing in to fine dust.

IV. Taking such normal precautions like fencing and lighting in excavation of trenches, working at heights, during night time etc. as per the site requirement.

V. Supply work men with proper belts, ropes etc., when working in precarious slopes and heights etc. as per the site requirement.

VI. Avoiding un-insulated electrical wire etc., as they would electrocute the workers.

VII. Taking necessary steps towards training the workers concerned on the machinery before they are allowed to handle them independently and taking all necessary precautions in and around the areas where machines hoists cable pulleys, rollers, hydraulic tools etc. are working.

VIII. The Contractor should isolate the work spot by providing safety barricades, Signage boards etc.

## 9.0 INDEMNITY BOND

The tenderers should submit Indemnity Bond at the time of the Agreement as specified below. Name of  
work

I \_\_\_\_\_ contractor, S/o.

aged \_\_\_\_\_

Resident of \_\_\_\_\_

\_\_\_\_\_ do hereby bind myself to pay all the claims that may come (a) under Workmen's Compensation Act. 1933 with any statutory modification thereof and rules there under or otherwise for or in respect of any damage or compensation payable in connection with any accident or injury sustained (b) under Minimum wages Act 1948 (c) under payment of wages Act. 1936 (d) under the Contract labor (Regulation and Abolition) Act. 1970 by workmen engaged for the performance of the business relating to the above contract ie., failing such payment of claims of workmen engaged in the above work and any claim raised by statutory authorities for nonpayment of taxes and duties, I abide in accepting for the recovery of such claims, effected from me / any of my assets with the Corporation and with other Government Departments / Corporations

## 10. FIRE FIGHTING MEASURES

a) The contractor shall provide and maintain adequate firefighting equipment and take adequate fire precaution measures for the safety of all personnel and temporary and permanent works and shall take action to prevent damage and destruction by fire of trees shrubs and grasses.

b) Separate payment will not be made for the provision of fire prevention measures.

## 11.0 RESOLUTION OF DISPUTES & ARBITRATION

11.1 All disputes, other than quality, quantity, workmanship, specification, design, drawing, extension of time and rates for extra items, arising out of or relating to this contract whether arising during the progress of the work or after cancellation, termination, completion or abandonment there of shall be dealt with as mentioned herein after. The decision of TTUPL on the above said excepted matters shall be final and binding.

11.2 If the contractor considers any work demanded of him to be outside the requirements of the contract or disputes any drawings, record or decision given in writing in connection with or arising out of the contract or carrying out of the work, he shall promptly within 15 days request the TTUPL in writing for written instruction or decision.

11.3 If the Contractor is dissatisfied with this decision, the Contractor shall within a period of 7 days from receipt of the decision, give written notice to TTUPL for appointment of Arbitrator failing which the said decision shall be final binding and conclusive and not referable to adjudication by the Arbitrator.

**11.4 In case the Contractor is a Public Sector Enterprise or a Government Department,** the dispute shall be referred for resolution in Permanent Machinery for Arbitration (PMA) of the Department of Public Enterprise, Government of India. Such dispute or difference shall be referred by either party for Arbitration to the sole Arbitrator in the Department of Public Enterprises to be nominated by the Secretary to the Government of India in-charge of the Department of Public Enterprises. The award of the Arbitrator shall be binding upon the parties to the dispute, provided, however, any party aggrieved by such award may make a further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law & Justice, Government of India. Upon such reference the dispute shall be decided by the Law Secretary or the Special Secretary / Additional Secretary, when so authorized by the Law Secretary, whose decision shall bind the Parties finally and conclusive. The Parties to the dispute will share equally the cost of arbitration as intimated by the Arbitrator.

## **11.5 IN ALL OTHER CASES**

11.5.1 In all other cases, any dispute submitted by a party to arbitration shall be heard by an arbitration panel composed of three arbitrators, in accordance with the provisions set forth below.

11.5.2 The TTUPL and the Contractor shall each appoint one arbitrator, and these two arbitrators shall jointly appoint a third arbitrator, who shall chair the arbitration panel. If the two arbitrators do not succeed in appointing a third arbitrator within Thirty (30) days after the later of the two arbitrators has been appointed, the third arbitrator shall, at the request of either party, be appointed by the Appointing Authority for third arbitrator which shall be the President, Institution of Engineers.

11.5.3 If one party fails to appoint its arbitrator within thirty (30) days after the other party has named its arbitrator, the party which has named an arbitrator may request the Appointing Authority to appoint the second arbitrator.

11.5.4 If for any reason an arbitrator is unable to perform its function, the mandate of the Arbitrator shall terminate in accordance with the provisions of applicable laws and a substitute shall be appointed in the same manner as the original arbitrator.

11.5.5 Arbitration proceedings shall be conducted with The Arbitration and Conciliation Act, 1996. The venue or arbitration shall be New Delhi.

11.5.6 The decision of a majority of the arbitrators (or of the third arbitrator chairing the arbitration panel, if there is no such majority) shall be final and binding and shall be enforceable in any court of competent jurisdiction as decree of the court. The parties thereby waive any objections to or claims of immunity from such enforcement.

11.5.7 The arbitrator(s) shall give reasoned award.

11.5.8 Notwithstanding any reference to the arbitration herein, the parties shall continue to perform their respective obligations under the agreement unless they otherwise agree.

11.5.9 Cost of arbitration shall be equally shared between the Successful bidder or Contractor and TTUPL.

11.6 The arbitration shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act, 1996 or any statutory modifications or reenactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceedings under this clause.

11.7 It is also a term of contract that a simple interest of not more than 6% shall be applicable on the award.

## **12.0 PROTECTION OF ENVIRONMENT**

12.1 The Contractor shall take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation.

12.2 During continuance of the contract, the Contractor and his subcontractors shall at all times abide by all existing enactment on environmental protection and rules made there under, regulations, notifications and bye-law of the State or Central Government, or local authorities and any other law, by-law, regulations that may be passed or notification that may be issued in this respect in future by the State or Central Government or the local authority.

12.3 Salient features of some of the major laws that are applicable are given below:  
The Water (Prevention and Control of Pollution) Act, 1974: This provides for the prevention and control of water pollution and the maintaining and restoring of wholesomeness of water. 'Pollution' means such contamination of water or such alteration of the physical, chemical or biological properties of water or such discharge of any sewage or trade effluent or of any other liquid, gaseous or solid substance into water (whether directly or indirectly) as may, or is likely to create a nuisance or render such water harmful or injurious to public health or safety, or to domestic, commercial, industrial agricultural or other legitimate uses, or to the life and health of animals or plants or of aquatic organisms. The Air (Prevention and Control of

Pollution) Act, 1981: This provides for prevention, control and abatement of air pollution, 'Air Pollution' means the presence in the atmosphere of any air pollutant', which means any solid, liquid or gaseous substance (including noise) present in the atmosphere in such concentration as may be or tend to be injurious to human beings or other living creatures or plants or property or environment. The Environment (Prevention and Control of Pollution) Act, 1986: This provides for the protection and improvement of environment and for matters connected to herewith, and the prevention of hazards to human beings. Other living creatures, plants and property, 'Environment' includes water, air and land and the interrelationship which exists among and between water, air and land, and human beings, other living creatures, plants, micro-organism and property. The Public Liability Insurance ACT 1991: This provides for public liability insurance for the purpose of providing immediate relief to the persons affected by accident occurring while handling hazardous substance means any substance or preparation which is defined as hazardous substance under the Environment (Protection) Act, 1986, and exceeding such quantity as may be specified by notification by the Central Government.

### **13.0 DEPLOYMENT OF MANPOWER**

13.1 The contractor shall deploy the following minimum man power at site to take instructions from TTUPL Staff & Report the site activities on day to day basis execution of quality work and maintain all statutory records as per Govt. norms/as directed by the TTUPL.

13.2 Two Engineers (Graduate with minimum 2 years experience and/or Diploma with 4 years experience), the contractor shall furnish the name, bio data, experience of the personal intended to be posted at site at the start of work. Site Engineers are to be deployed irrespective of the Contractor or the Director / Manager of the contracting company being an Engineer himself. Attendance register should be kept at TTUPL security gate.

13.3 The Contractor shall maintain supervisor staff to Labor ratio as per standard government / CPWD norms.

13.4 The Contractor may employ more number of site Engineers other than above mentioned Engineers to get quality workmanship and maintain all statutory records.

### **14.0 QUANTITY OF WORK**

The quantities mentioned in the work order are only approximate in nature i.e., approximate quantified scope. Hence, the contractor **can't claim any compensation towards non-operation of part or total quantities and non- operated items listed in the Work Order.**

### **15.0 PROGRESS REPORT**

Contractor should raise daily RFI for every activity one day prior for the inspection of work, Monthly progress report along with photographs of work progress shall be submitted to the TTUPL before the 5<sup>th</sup> day of every month.

### **16.0 ACCIDENT OR INJURY TO WORKMEN**

(Signature of Contractor with

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Accepting

16.1 TTUPL shall not be responsible for any injury or loss of life of any worker of the contractor that may take place while on work. Any compensation or expenditure towards treatment for such loss of life or injury shall be the sole responsibility of the contractor.

16.2 The contractor is solely responsible for any damage injury or accident that may occur to any of his personnel working under this contract. He will not claim any compensation from TTUPL.

**17.0 PAYMENTS FOR QUANTIFIED ITEMS:** Since the payments are based on actual site measurement, the contractors are advised to procure the materials based on actual site requirement. Payment will not be made for left out and unused materials.

## **18.0 TAXES**

18.1 During the currency of the contract, deduction of TDS as applicable from the gross value of each bill of the contract.

18.2 The contractor's staff, personnel and labor will be liable to pay personnel income taxes in respect of their salaries and wages as are chargeable under the laws and regulations for the time being in force, and the contractor shall perform such duties in regard to such deductions thereof as may be imposed on him by such laws and regulations.

18.3 TDS Labor Cess, Seignorage (if applicable) as per rule will be borne by the contractor. Taxes to be deducted at source and cheques for Cess / Seignerrage (if applicable) will be issued to the contractor. The contractor will be required to deliver the cheque to the tax authorities, the acknowledgement of which will be deposited by the contractor with TTUPL along with subsequent bill.

18.4 The contractor shall submit to TTUPL proof of payment of service tax to concerned tax authorities from time to time on demand.

## **19.0 MATERIALS ENTRY**

It would be necessary for the contractor to get his materials a gate entry authorization at the TTUPL Main gate duly signed by the duty officer of TTUPL. **These gate entry records must be submitted along with the bills.**

## **20.0 DETAILED WORKING DRAWINGS**

20.1 The Contractor shall prepare his own detailed working drawings if any required and get them approved by TTUPL.

20.2 Cost of all drawings and details to be furnished by the Contractor shall be deemed to be included in his tendered rates of work. Approval of Drawings if any etc.. shall not be construed as authorizing additional work or increased cost to the company unless such additional works are authorized in writing by the TTUPL.

## **21.0 REGULATIONS & STANDARDS**

**The Road work shall confirm in all respects to the Indian Standard Code of Practice for Road works and MORTH Specifications. Wherever the specifications of this tender document calls for higher standard of material and/or workmanship than those required by any of the above codes and regulations then this specifications shall take precedence over the said regulations and standards.**

## **22.0 MANUFACTURER'S INSTRUCTIONS**

22.1 Where manufacturers have furnished specific instructions relating to the materials used and procedural steps in this job, covering points not specifically mentioned in this document, those instructions shall be followed in all cases.

## **23.0 DEVIATION LIMIT:**

25.10 Deviation means deviation in quantities of items, i.e. where there is increase or decrease in the quantities of items of work in the agreement.

25.20 To execute all the works referred to in the said documents up to the terms and conditions contained or referred to therein and to carry out such deviations as may be ordered up to maximum of **10 percent**.

25.30 Deviations in quantities up to  $\pm 10\%$  of agreement quantities will not need any prior consent of contractor and contractor is bound to execute work if Deviation of quantities up to any extent

25.40 If total deviation of quantity is beyond the deviation limit  $\pm 10\%$  of the contract then deviations beyond the limit of  $\pm 10\%$  should not be made at site without approval of competent sanction authority.

## FORM OF PERFORMANCE GUARANTEE / BANK GUARANTEE BOND

In consideration of the **Resolution Professional**, TTUPL (hereinafter called “**Resolution Professional**”) having offered to accept the terms and conditions of the proposed agreement between

..... and ..... (Here in after called “the said contractor(s)” for the work ..... (Here in after called “the said agreement”) having agreed to production of an irrevocable Bank guarantee for Rs..... (Rupees

.....only) as a security / guarantee from the contractor(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement.

1. We ..... (Here in after referred to as the “Bank”) hereby undertake to (Indicate the name of the Bank) pay to the Resolution Professional an amount not exceeding Rs..... (Rupees..... Only); on demand by the Resolution Professional.

2. We.....do hereby under take to pay the amounts due and payable (Indicate the name of the Bank) under this guarantee without any demur, merely on a demand from the Resolution Professional stating that the claimed is required to meet the recoveries due or likely to be due from the said contractor(s). Any such demand made on the bank shall be conclusive as regards the amount due and payable by the bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs ..... (Rupees..... Only)

3. We, the said Bank, further undertake too pay the Resolution Professional any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any Court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be valid discharge of our liability for payment there under, and contractor(s) shall have no claim against us for making such payment.

4. We.....further agree that the guarantee herein contained shall (indicate the name of the Bank) remain in full force and effect during the period that would be taken for the performance of the said agreement, and it shall continue to be enforceable till all the dues of the Resolution Professional under or by virtue of the said agreement have been fully paid, and it’s claims satisfied or discharged, or till the TTUPL, on behalf of the **Resolution Professional**, certifies that the terms and conditions of the said agreement have been fully and properly carried out by the said contractor(s), and accordingly discharges this guarantee.

5. We.....further agree with the Resolution Professional that the Resolution Professional (Indicate the name of the Bank) shall have the fullest liberty without our consent, and without effecting in any manner our obligations hereunder, to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor(s) from time to time or to postpone for any time or from the time to time any of the powers exercisable by the Resolution Professional against the said contractor(s), and to forbear or enforce any of the terms and conditions related to the said

(Signature of Contractor with ..... Page 70 of 101 ..... Accepting



agreement, and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said contractor(s) or for any forbearances, act of omission on the part of the Resolution Professional or any indulgence by the Resolution Professional to the said contractor(s) or by any such matter or things whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. This guarantee will not be discharged due to the change in the constitution of the Bank or the contractor(s).

7. We.....lastly undertake not to revoke this Guarantee except with (Indicate the name of the Bank) the previous consent of the Resolution Professional in writing.

8. This guarantee shall be valid up to .....unless extended on demand by the Resolution Professional notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs.....(Rupees.....only), and unless a claim in writing is lodged with us within six months of the date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged.

Dated        the.....        day        of.....

For..... (Indicate the name of the Ban

# **VOL-IV**

## **SCOPE OF WORK**

## **Scope of Work**

1. Provision of Scarifying the existing bitumen concrete with the help of milling machine up to 30-40 mm depth,
2. Provision of Bituminous Concrete 40 mm consolidated thick conforming to Clause 507 of MORT&H Specification for road and bridge works (Fifth Revision) including cleaning of road surface.
3. Application of Tack Coat by mechanical means conforming to clause 503 of MORT&H (Fifth Revision) specifications including the cost of cationic bitumen emulsion (RS 1) complying with IS : 8887 or suitable low viscosity paving bitumen of VG 10 grade conforming to IS : 73, thorough cleaning of road surface including pre heating of emulsion to the specified temp as approved by Engineer-In-Charge.
4. Earth Work in Embankment (Berm Filling) up to 1.5 width on both side 40mm thick compacted confirming to clause 305 of MORT&H specifications (Fifth Revision).
5. Marking of Centre and Edge Line with Thermoplastic Paint and Glass Beads with Road marking Machine confirming to clause 803 of MORT&H specifications (Fifth Revision).
5. **Field lab at work site :** The contractor shall be equipped with a laboratory and have the under mentioned equipments or any other required equipments essential for execution of work, in satisfactory working condition. He shall conduct the tests and maintain the records to be produced with each RAR.

### **I. Balance**

- (a) 7 Kg to 10 Kg capacity semi-self indication type accuracy 1 gm electronic - 2 Nos.
- (b) 500 gm capacity semi-self indicating Electronic Type-Accuracy 0.01gm - 2 Nos.
- (c) Pan balance 5 Kg capacity Accuracy 0.5 gm - 1 Nos. (d) Pan balance 15 Kg capacity Accuracy 1 gm - 2 Nos. (e) Platform Scale-300 Kg capacity

### **II. Ovens-electrically operated, thermostatically controlled**

- (a) From 1000C to 2200C sensitivity 10C - 2 Nos.

### **III. Sieves : as per IS 460-1962**

- (a) I.S. Sieves 450mm internal dia of sieve sets as per IS:1 of required sieve sizes complete with lid and pan. – 02 Sets
- (b) I.S. size 200mm internal dia (brass frame and steel or brass wire cloth mesh) consisting of sieve sets of required sieve sizes complete with lid and pan. – 02 Sets

### **IV. Stop watches 1/5 sec. accuracy - 2 Nos**

**V. Glassware comprising of Beakers, Pipettes, dishes, measuring cylinder - (100 to 1000cc capacity) glass rods and funnels, glass thermometers range 0<sup>0</sup>C to 100<sup>0</sup>C each and metallic thermometers range upto 300<sup>0</sup>C. - 1 Doz.**

**VI. Hot plates 200mm dia (1500 watt)/Gas or Kerosene Stove. - 2 Nos**

**VII. Enamel Trays**

- (a) 600mm x 450mm x 50 mm - 6 Nos
- (b) 450mm x 300mm x 40mm -6 Nos
- (c) 300mm x 250mm x 40 mm - 6 Nos
- (d) Circular plates of 250mm dia - 1 No

**VIII. For Wet Mix Macadam, Bitumen and Bituminous Mixes**

- (a) Constant temperature bath for accommodating bitumen test specimen, electrically operated and thermo statically controlled. - 1 No.
- (b) Penetrometer automatic type, adjustable weight arrangement and needles as per IS:1203-1958. - 1 No.
- (c) Soxhlet extraction or centrifuge type apparatus complete with extraction thimbles with solvent and filter paper. - 1 No.
- (d) Marshall compaction apparatus automatically operated as per ASTM 1559-62 T complete with accessories. - 1 No. (e) Flakiness & elongation index test apparatus - 1 No
- (f) Aggregate impact test apparatus as per IS:2386 (Part 4) 1963. - 1 No
- (g) Core cutting machine with 10 cm dia diamond cutting edge (Portable) - 2 Nos.
- (h) Sand replacement/core cutter for density measurement - 2 Nos

**IX. For control of profile and surface evenness**

- (a) Auto levels and precision staff - 1 set
- (b) 3 meter straight edge and measuring wedge - 3 sets
- (c) Camber templates 2 lane - 3 sets
  - i) Crown type cross-section - 1 set
  - ii) Straight run cross-section - 2 sets
- (d) Steel tape
  - i) 3/5m long - 2 sets
- (e) Metallic tape
  - (i) 30/30 mtr long - 2 sets

**VOL-V**

**TECHNICAL SPECIFICATIONS**

## **TECHNICAL SPECIFICATIONS**

All materials to be used, all methods adopted and all works performed shall be strictly in accordance with the requirements of the specification mentioned hereunder.

### **1. GENERAL**

1.1 The specifications contained in Ministry of Road Transport and Highways —Specifications for Road and Bridge Works (Fifth Revision) published by Indian Road Congress during 2013 (hereinafter referred to as MORT&H Specifications) shall generally be followed except otherwise mentioned in succeeding Clauses/Conditions/Paras.

### **2 QUALITY CONTROL**

2.1 For quality control of the work provision of Section-900 of MORT&H publication on —Specification on Road & Bridge work shall be followed. Various tests as specified therein shall be conducted at the expense of the contractor as per the frequency specified for each. If required Suitable laboratory at site be established by the contractor to facilitate conduct of these tests.

2.2 Immediately on taking over the site, Engineer and contractor shall carry out joint survey for longitudinal section and cross-section of entire work area and plot it suitably at appropriate scale. The width of road at every cross-section shall be recorded. This survey shall be incidental to the works and nothing extra shall be paid to contractor on this account.

2.3 The following shall be followed while collecting surface profile data.

2.3.1 The setting out shall be done in accordance with para 109 of the MORT&H specifications. The base line shall be marked with concrete pillars within ROW, but sufficiently away from the pavement edge so as to avoid the damage, while execution of BC works. The details like bearing, perpendicular distance from nearby identified objects etc. shall be noted, so that if required reference bench marks can be re-established.

2.3.2 The maximum distance between two reference bench marks shall not be more than 20 mtrs. At curves this distance shall be reduced appropriately so as to facilitate re-locating of some points numbers of times to record the levels.

2.3.3 The permanent bench marks shall be fixed on concrete pillars established as above at every 500 mtr distance, but on either side of road.

2.3.4 While carrying out survey works, the grid points shall be established as under :-

(a) At every 3 mtr in longitudinal direction along the center line. This can be reduced at curves appropriately as per the decision of the Engineer-In-Charge.

(b) For cross section 2 points along the edges, one point along the center line and one point on either side of center line at a distance of 2.5 mtr from center line.

2.3.5 The proposed profile for BC layers shall be fixed by Engineer based on profile of existing road thus evolved and shall be approved by Commander Contract.

2.4 On completion of BC layer the level shall be recorded at pre-established points and profile of BC layer shall be marked on cross section plotted earlier, so as to arrive at measurement of the work done.

### 3 TACK COAT

**3.1 Scope Clause 503 of MoRT&H specifications (fifth revision) shall apply.** The work shall consist of the application of a single coat of low viscosity liquid bituminous material to existing bituminous, cement concrete or primed granular surface preparatory to the superimposition of a bituminous mix, when specified in the Contract or as instructed by the Engineer. The work shall be carried out on a previously prepared surface in accordance with Clause 501.8 of MoRT&H specifications (fifth revision).

**3.2 Materials** The binder used for tack coat shall be either Cationic bitumen emulsion (RS 1) complying with IS :8887 or suitable low viscosity paving bitumen of VG 40 grade conforming to IS:73. The use of cutback bitumen RC:70 as per IS:217 shall be restricted only for sites at sub-zero temperature or for emergency applications as directed by Engineer. The type and grade of binder for tack coat shall be as specified in the Contract or as directed by the Engineer-in-Charge. The contractor shall procure bitumen emulsion required for subject work from IOC/HPCL/approved manufacturer only under his own arrangement. The necessary vouchers in support of procurement of bitumen emulsion shall be produced to Engineer alongwith necessary test certificates.

**3.3 Weather and Storm Seasonal Limitations :-** Bituminous material shall not be applied during a dust storm or when the weather is foggy, rainy or windy or when the temperature in the shade is less than 10°C . Where the tack coat consists of emulsion, the surface shall be slightly damp, but not wet. Where the tack coat is of cutback bitumen, the surface shall be dry.

### 3.4 Construction

**3.4.1 Equipment** The tack coat shall be applied by a self propelled or towed bitumen pressure sprayer, equipped for spraying the material uniformly at a specified rate. Hand spraying shall not be permitted except in small areas, inaccessible to the distributor or in narrow strip shall be sprayed with a pressure hand sprayer or as directed by Engr-in-charge.

**3.4.2 Preparation of Base** The surface on which the tack coat is to be applied shall be clean and free from dust, dirt, and any extraneous material, and be otherwise prepared in accordance with the requirements of Clause 501.8 of MoRT&H specifications (fifth revision). The granular or stabilized surfaces shall be primed as per Clause 502 of MoRT&H specifications (fifth revision). Immediately before the application of the tack coat, the surface shall be swept clean with a mechanical broom, and high pressure air jet, or by other means as directed by the Engineer-in-charge.

**3.4.3 Application of Tack Coat** Clause 503.4.3 shall apply. The application of tack coat shall be at the rate specified in Table below, and it shall be applied uniformly. If rate of application of Tack coat is not specified in the contract, then it shall be the rate specified in Table 500-5. No dilution or heating at site of RS1 bitumen emulsion shall be permitted. Paving bitumen if used for tack coat shall be heated to appropriate temperature in bitumen boilers to achieve viscosity less than 2 poise. The normal range of spraying temperature for a bituminous emulsion shall be 200C to 700C and for cutback , 500C to 800C . The method of application of tack coat will depend on the type of equipment to be used, size of nozzles, pressure at the spray bar, and speed or forward movement. The contractor shall demonstrate at a spraying trial, that the equipment and method to be used is capable of producing a uniform spray, within the tolerances specified. Tack coat shall be applied uniformly as mentioned below :-

**Table 500-5 : Rate of Application of Tack Coat**

S/No.	Type of surface	Rate of Spray of Binder in Kg per sq.m
(i)	Normal bituminous surface	0.20 to 0.30
(ii)	Granular surfaces treated with primer	0.25 to 0.30
(iii)	Cement Concrete pavement	0.30 to 0.35

**3.4.4 Curing of Tack Coat** The tack coat shall be left to cure until all the volatiles have evaporated before any subsequent construction is started. No plant or vehicle shall be allowed on the tack coat other than those essential for the construction.

**3.4.5 Quality Control of Work** For control of the quality of materials and the works carried out, the relevant provisions of Section 900 of MoRT&H specifications (fifth revision) shall apply

**3.4.6 Arrangements for Traffic** During the period of construction ,arrangements for traffic shall be made in accordance with the provisions of Clause 112 of MoRT&H specifications (fifth revision).

**3.4.7 Measurement of Payment** Tack Coat shall be measured in terms of surface area of application in square meter.

**3.4.8 Rate** The contract unit rate for tack coat shall be payment in full for carrying out the required operations including for all components listed in Clause 401.7 (i) to (v) and as applicable to the work specified in these Specifications. The rate shall cover



the provision of tack coat, at 0.25 kg per square meter, with the provision that the variation between this quantity and actual quantity of bitumen used will be assessed and the payment adjusted accordingly

#### 4. BITUMINOUS CONCRETE 40 MM THICK

**4.1 SCOPE:- Clause 507 of MoRT&H specifications (fifth revision) shall apply.** This work shall consist of construction of Bituminous Concrete, for use in wearing and profile corrective courses. This work shall consist of construction in a single layer of bituminous concrete on a previously prepared bituminous bound surface. A single layer shall be 40mm thick.

#### 4.2 MATERIAL

**4.2.1 Bitumen** The bitumen shall be viscosity grades paving bitumen VG-30 complying with Indian Standard Specification of paving bitumen, IS:73 or as specified in the Contract.

**4.2.2 Coarse Aggregates** The course aggregates shall be generally as specified in Clause 504.2.2 of MoRT&H specifications (fifth revision), except that the aggregates shall satisfy the physical requirements fo Table 500-16 and where crushed gravel is proposed for use as aggregate, not less than 95 percent by weight of the crushed material retained on the 4.75 mm sieve shall have at least two fractured faces.

**Table 500-16 : Physical Requirements of Coarse Aggregate for Bituminous Concrete.**

S/No	Property	Test	Test method	Requirements
1	Cleanliness (dust)	Grain size analyses	IS : 2386 Part-I	Max 5% passing 0.075 mm sieve
2	Particle shape	Combined Flakiness and Elongation Indices	IS : 2386 Part-I	Max 35%
3	Strength	Los Angeles Abrasion value or Aggregate Impact value	IS : 2386 Part-IV IS : 2386 Part-IV	Max 30% Max 24%
4	Polishing	Polished Stone Value	BS : 812 Part-114	Min 55
5	Durability	Soundness either : Sodium Sulphate or Magnesium Sulphate	IS: 2386 Part – V	Max 12% Max 18%
6	Water absorption	Water absorption	IS : 2386 Part-III	Max 2%
7	Stripping	Coating and stripping of Bitumen Aggregate mix	IS : 6241	Min retained coating 95%
8	Water	Retained Tensile	AASHTO 283	Min 80%

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	Sensitivity	Strength ( * )		
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(\*) If the minimum retained tensile test strength falls below 80 percent, use of anti stripping agent is recommended to meet the requirement.

**4.2.3 Fine Aggregates** The fine aggregates shall be all as specified in Clause 505.2.3. Fine aggregates shall consist of crushed or naturally occurring mineral material, or a combination of the two, passing the 2.36 mm sieve and retained on the 75 micron sieve. These shall be clean, hard, durable, dry and free from dust, and soft or friable matter, organic or other deleterious matter. The plasticity index of the fraction passing the 0.425 mm sieve shall not exceed 4, when tested in accordance with IS : 2720 (Part 5).

**4.2.4 Filler** Filler shall be as specified in Clause 505.2.4. Filter shall consist of finely divided mineral matter such as rock dust, hydrated lime or cement approved by the Engineer. The filler shall be graded within the limits indicated in Table 500-9 of MoRT&H specification Road & Bridge works (fifth Revision).

The filler shall be free from organic impurities and have a plasticity Index not greater than 4. The Plasticity Index requirement shall not apply if filler is cement or lime. Where the aggregates fail to meet the requirements of the water sensitivity test in Table 500-8 of MoRT&H specification Road & Bridge works (fifth Revision), then 2 percent by total weight of aggregate, of hydrated lime shall be used and percentage of fine aggregate reduced accordingly.

**4.3 Aggregate Grading and Binder Content** As per the Clause 507.2.5 of MoRT&H Specification Road & Bridge works (Fifth Revision). When tested in accordance with IS : 2386 Part 1 (Wet grading method), the combined grading of the coarse and fine aggregates and filler shall fall within the limits shown in Table 500-17. The grading shall be as specified in the Contract. The grading shall be grading -2 of Table 500-17 of MoRT&H Specification Road & Bridge works (Fifth Revision).

**Table 500-17 : Composition of Bituminous Concrete Pavement Layers**

<b>Grading</b>	<b>1</b>	<b>2</b>
<b>Nominal aggregate size</b>	<b>19 mm</b>	<b>13.2mm</b>
<b>Layer thickness</b>	<b>50mm</b>	<b>30-40 mm</b>
<b>Is Sieve (mm)</b>	<b>Cumulative % by weight of total aggregate passing</b>	
45		
37.5		
26.5	100	
19	90-100	100
13.2	59-79	90-100
9.5	52-72	70-88
4.75	35-55	53-71
2.36	28-44	42-58
1.18	20-34	34-48
0.6	15-27	26-38
0.3	10-20	18-28
0.15	5-13	12-20
19	90-100	100
0.075	2-8	4-10
Bitumen content % by mass of total mix	Min 5.2*	Min 5.4**

**Notes :-** \* The nominal maximum particle size is the largest specified sieve size up on which nay of the aggregate is retained. \*\* Corresponds to specific gravity of aggregate being 2.7. In case aggregate have specific gravity more than 2.7, the minimum bitumen content can be reduced proportionately. Further the region where highest daily mean air temperature is 30°C or lower and lowest daily air temperature is - 10°C or lower, the bitumen content may be increased by 0.5 percent

#### **4.4 Mix Design-**

**4.5 Requirement for the Mix:-** Clause 505.3.1 shall apply. Apart from conformity with the grading & quality requirements for individual ingredients, the mixture shall meet the requirements set out as under:-

**Table 500-11 : Requirements for Dense Graded Bituminous Macadam**

Properties	Viscosity Grade Paving Bitumen	Test Method
Compaction level	75 blows on each face of the specimen	
Minimum stability (kN at 600C)	9.0	AASHTO T245
Marshall flow (mm)	2-4	AASHTO T245
Marshall Quotient (Stability /Flow)	2-5	MS-2 and ASTM D2041
% air voids	3-5	
% Voids Filled with Bitumen (VFB)	65-75	
Coating of aggregate particle	95% minimum	IS : 6241
Tensile Strength ratio	80% Minimum	AASHTO T 283
% Voids in Mineral Aggregate	Minimum percent voids in mineral aggregate (VMA) are set out in Table under clause 4.6 below (Table 500-12).	

**4.6 Binder Content :** Clause 505.3.2 shall apply. The binder content shall be optimized to achieve the requirements of the mix set out in Table under clause 500.11 above. The binder content shall be selected to obtain 4 percent air voids in the mix design. The Marshall method for determining the optimum binder content shall be adopted as described in the Asphalt Institute Manual MS-2.

Where maximum size of the aggregate is more than 26.5 mm, the modified Marshall Method using 150 mm diameter specimen described in MS-2 and ASTM D 5581 shall be used. This method requires modified equipment and procedures. When the modified Marshall test is used, the specified minimum stability values in Table 500-12 shall be multiplied by 2.25 and the minimum flow shall be 3 mm.

**Table 500-12 : Minimum Percent Voids in Mineral Aggregate (VMA)**

Nominal Maximum Particle Size <sup>1</sup>	Minimum VMA Percent Related to Design Percentage Air voids		
	3.0	4.0	5.0
26.5	11.0	12.0	13.0
37.5	10.0	11.0	12.0

**Note :** Interpolate minimum voids in the mineral aggregate (VMA) for designed percentage air voids values between those listed.

#### 4.7 Job Mix Formula

4.7.1 Clause 505.3.3 shall apply. The Contractor shall submit to the Engineer for approval at least 21 days before the start the work, the job mix formula proposed for use in the works, together with the following details:-

(i) Source and allocation of all materials;

(ii) Proportions of all materials expressed as follows:-

(a) Binder type, and percentage by weight of total mix;

(b) Coarse aggregate/Fine aggregate/Mineral filler as percentage by weight of total aggregate including mineral filler;

(iii) A single definite percentage passing each sieve for the mixed aggregate; (iv) The individual grading of the individual aggregate fractions, and the proportion of each in the combined grading.

(v) The results of mix design such as maximum specific gravity of loose mix (Gmm), compacted specimen densities, Marshall stability, flow, air voids, VMA, VFB and related graphs and test results of AASHTO T 283 Moisture susceptibility test;

(vi) Where the mixer is a batch mixer, the individual weights of each type of aggregate, and binder per batch,

(vii) Test results of physical characteristics of aggregates to be used;

(viii) Mixing temperature and compacting temperature.

4.7.2 While establishing the job mix formula, the Contractor shall ensure that it is based on a correct and truly representative sample of the materials that will actually be used in the work and that the mixture and its different ingredients satisfy the physical and strength requirements of these Specifications.

4.7.3 Approval of the job mix formula shall be based on independent testing by the Engineer-in-Charge for which samples of all ingredients of the mix shall be furnished by the Contractor as required by the Engineer-in-charge.

4.7.4 The approved job mix formula shall remain effective unless and until a revised Job Mix Formula is approved. Should a change in the source of materials be proposed, a new job mix formula shall be forwarded by the contractor to the Engineer for approval before the placing of the material.

**4.7.5 Plant Trials – Permissible Variation in Job Mix Formula** Once the laboratory job mix formula is approved, the Contractor shall carry out plant trails to establish that the plant can produce a uniform mix conforming to the approved job mix formula. The permissible variations of the individual percentages of the various

ingredients in the actual mix from the job mix formula to be used shall be within the limits as specified in Table 500-18 and shall remain within the gradation band. These variations are intended to apply to individual specimens taken for quality control tests in accordance with section 900.

**Table 500-18 : Permissible Variations in Plant Mix from the Job Mix Formula**

<b>Description</b>	<b>Permissible variation</b>
	<b>Wearing course</b>
Aggregate passing 19mm sieve or larger	±7%
Aggregate passing 13.2mm, 9.5mm	±6%
Aggregate passing 4.75mm	±5%
Aggregate passing 2.36mm, 1.18, 0.6mm	±4%
Aggregate passing 0.3mm, 0.15mm	±3%
Aggregate passing 0.075mm	±1.5%
Binder content	±0.3%
Mixing temperature	±10°C

**4.7.6 Laying Trails :** The requirements for laying trails shall be as specified in Clause 505.3.5. The compaction layers of bituminous concrete (BC) shall have a minimum field density equal to or more than 92 percent of the average theoretical maximum specific gravity (G<sub>mm</sub>) obtained on the day of compaction in accordance with ASTM D2041.

#### **4.8 Construction Operations**

**4.8.1 Weather And Seasonal Limitations** Clause 501.5.1 shall apply. Laying shall be suspended:- i) In presence of standing water on the surfaces; ii) When rain is imminent, and during rains, fog or dust storm; iii) When the base/binder course is damp; iv) When the air temperature on the surface on which it is to be laid is less than 100C; v) When the wind speed at any temperature exceeds the 40 Km per hour at 2 m height;

**4.8.2 Preparation of the Base** The surface on which the bituminous concrete is to be laid shall be prepared in accordance with Clauses 501 and 902 of MoRT&H Specifications for Road and Bridge Works (fifth revision) as appropriate, or as directed by the Engineer. The surface shall be thoroughly swept clean by mechanical broom and dust removed by compressed air. In locations where a mechanical broom cannot get access, other approved methods shall be used as directed by the Engineer.

**4.8.3 Tack Coat** The provisions of Clause 3 of particular specification shall apply.

**4.8.4 Mixing and Transportation of the Mix:-** The provisions as specified in

Clauses 501.3, 501.4 and 504.4.7 shall apply.

**4.8.5 Mixing** Premixed bituminous materials shall be prepared in a Hot Mix Plant of adequate capacity and capable of yielding a mix of proper and uniform quality with thoroughly coated aggregates. The appropriate mixing temperature shall be as under:-

(a) Bitumen Temp : 145°C to 165°C (b) Aggregate

Temp : 145°C to 170°C

(c) Mixed Material Temp : 145°C to 165°C

(d) Laying Temperature : 135 Min

(e) Rolling Temperature : 85 Min (\*)

(\*) Rolling must be completed before the mat cools to these minimum temperatures. The difference in temperature between the binder and aggregate shall at no time exceed 14°C. In order to ensure uniform quality of the mix and better coating of aggregates, the Hot Mix Plant shall be calibrated from time to time. The essential features of the hot mix plants are given in Annex -A' of IRC:27.

**4.8.6 Temperature Data** :- The comprehensive temperature data for temp of bitumen, temp of aggregate while production of hot mix, temperature of hot mix and temperature of mixture while laying shall be recorded by the contractor and Engineer jointly at regular interval so as to establish the consistency of temperature control during the various operation. The mixture not satisfying the requirement as specified shall be rejected.

**4.8.7 Transporting**:- Bituminous material shall be transported in clean insulated and covered vehicles. An asphalt release agent such as soap or lime water may be applied to the interior of the vehicle to prevent sticking and to facilitate discharge of the material.

**4.8.8 Spreading** The general provisions of Clauses **501.5.3** shall apply. Prior to spreading the mix, the base shall be prepared by carrying out the required operations as per Clause 501.8 depending upon the site conditions. Except in areas paver cannot get access, bituminous material shall be spread, leveled and tamped by an approved self propelled paving machine equipped with an electronic sensing device. The essential features of the paver finisher shall conform to Annexure A of IRC : 27. As soon as possible after arrival at site, the materials shall be supplied continuously to the paver and laid without any delay. The rate of delivery of material to the paver shall be regulated to enable the paver to operate continuously. The travel rate of the paver, and its method of operations, shall be adjusted to ensure an even and uniform flow of bituminous material across the screed, free from dragging, tearing and segregation of the material. In areas with restricted space (Such as confined space, foot ways of irregular shape and varying thickness, approaches to expansion joints, etc. ) where a paver cannot be used, the material shall be spread, raked and leveled with suitable hand tools by trained staff and compacted to the satisfaction of the Engineer.

The minimum thickness of material laid in each paver pass shall be in accordance with the minimum valued given in the relevant parts of these specification. When laying binder course or wearing course of approaches and expansion joints of a structure, machine laying shall stop 300 mm short of the joints. The reminder of the pavement upto the joint, and the corresponding area beyond it, shall be laid by hand, and the joint or joint cavity shall be kept clear of surfacing material.

Bituminous material, with a temperature greater than 15°C, shall not be laid or deposited on bridge deck water- proofing systems, unless precaution against heat damage have been approved by the Engineer-in-Charge.

Hand placing of premixed bituminous materials shall only be permitted in the following circumstances:-

- i) For laying regulating courses of irregular shape and varying thickness. ii) In confined spaces where it is impracticable for a paver to operate.
- iii) At the approaches to expansion joints at bridges, viaducts or other structures.
- iv) For filling of pot holes.
- v) Where directed by the Engineer.

**4.8.9 Rolling** The General provisions of Clause 501.6 and 501.7 of MoRT&H Specifications Road & Bridge works (Fifth Revision) shall apply as modified by the approved laying trials.

**4.9 Opening to Traffic** Provisions in Clause 504.5 shall apply. The traffic may be allowed after completion of the final rolling when the mix material has cooled down to the surrounding temperature.

**4.10 Surface Finish and Quality Control** The surface finish of the completed construction shall conform to the requirement of clause 902. All materials and workmanship shall comply with the provisions set out in section 900 of these specification.

**4.11 Arrangements for Traffic** During the period of construction, arrangements for traffic shall be made in accordance with the provisions as per IRC codes and Specification.

**4.12 Measurement for payment** The measurement shall be as specified above

**4.13 Rate** The contract unit rate shall include cost for all components listed in abstract attached,



## 5. MARKING OF CENTRE AND EDGE LINE

5.1 **Scope Clause 803 shall apply.** The work shall consist of providing road markings of specified width, layout and design using pain of the required specification as given in the Contract and as per guidelines contained in from IRC :35-1997.

5.2 **Materials** Road marking shall be of ordinary road marking pain hot applied thermoplastic compound, reflectorised paint or cold applied reflective paint as specified in the item and the material shall meet the requirements as specified in theses Specification.

### 5.3 Hot Applied Thermoplastic Road Marking

#### 5.3.1 General

5.3.1.1 Clause 803.4 shall apply. The thermoplastic material shall be homogeneously composed of aggregate, pigment, resins and glass reflectorizing beads. The colour of the compound shall be white or yellow (IS colour No. 356) as specified in the drawings or as directed by Engineer-in-Charge.

#### 5.3.2.1 Requirements:

(i) **Composition:** The pigment, beads, and aggregate shall be uniformly dispersed in the resin. The material shall be free from all skins, dirt and foreign objects and shall comply with requirements indicated in Table below:-

**Table 800-9 : Proportions of Constituents of Marking material (Percentage by Weight)**

(Percentage by weight)		
Component	White	Yellow
Binder	18.0 min.	18.0 min.
Glass beads	30-40	30-40
Titanium Dioxide	10.0 min.	-
Calcium Carbonate and Inert Fillers	42.0 max.	See note
Yellow Pigments	-	

**Note:** Amount of yellow pigment, calcium carbonate and inert fillers shall be at the option of the manufacturer, provided all other requirements of this specification are met.

(ii) **Properties:** The properties of thermoplastics material, when tested in accordance with ASTM D36/BS-3262- (Part I), shall be as below:-

#### (a) Luminance:

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**White:** Daylight luminance at 45 degrees -65 per cent min. as per AASHTO M249.

**Yellow:** Daylight luminance at 45 degrees- 45 per cent min. as per AASHTO M249.

(b) **Drying time:** When applied at a temperature specified by the manufacturer and to the required thickness, the material shall set to bear traffic in not more than 15 minutes.

(c) **Skid resistance:** not less than 45 as per BS 6044.

(d) **Cracking resistance at low temperature:** The material shall show no cracks on application to concrete blocks.

(e) **Softening point:** 102.5 + 9.5° C as per ASTM D 36.

(f) **Flow resistance:** Not more than 25 per cent as per AASHTO M-249.

(g) **Yellowness Index** (for white thermoplastic paint) : not more than 0.12 as per AASHTO M- 249.

(iii) **Storage Life:** The material shall meet the requirements of these Specifications for a period of one year. The thermoplastic material must also melt uniformly with no evidence of skins of unmelted particles for the one year storage period. Any material not meeting the above requirements shall be replaced by the manufacturer/ supplier/ Contractor.

(iv) **Reflectorisation:** Shall be achieved by incorporation of beads, the grading and other properties of the beads shall be as specified in Clause 10.3.3

(v) **Marking:** Each container of the thermoplastic material shall be clearly and indelibly marked with the following information:

(a) The name, trade mark or other means of identification of manufacturer.

(b) Batch number

(c) Date of manufacture

(d) Colour (white or yellow)

(e) Maximum application temperature and maximum safe heating temperature.

(vi) **Sampling and Testing :** The thermoplastic material shall be sampled and tested in accordance with the appropriate ASTM/BS method. The Contractor shall furnish to the Employer a copy of certified test reports from the manufacturers of the thermoplastic material showing results of all tests specified herein and shall certify that the material meets all requirements of this Specification.

### 5.3.3 Reflectorizing Glass Beads

**General:** This Specification covers two types of glass beads to be used for the production of reflectorized pavement markings. Type 1 beads are those which are a constituent of the basic thermoplastic compound vide Table 800-9 and Type 2 beads are those which are to be sprayed on the surface vide Clause 803.6.4 The glass beads shall be transparent, colorless and free from milkiness, dark particles and excessive air inclusion.

#### 5.3.3.1 Specific requirements

A. **Gradation:** The glass beads shall meet the gradation requirements as below:-

**Table 800-10 : GRADATION REQUIREMENTS FOR GLASS BEADS**

Sieve size	Per cent retained
	Type 1
1.18 mm	0 to 3
850 micron	5 to 20
600 micron	-
425 micron	65 to 95
300 micron	-
180 micron	0 to 10
Below 180 micron	-

B. **Roundness:** The glass beads shall have a minimum of 70 per cent true spheres. C.

**Refractive Index:** The glass beads shall have a minimum refractive index of 1.50

D. **Free Flowing Properties:** The glass beads shall be free of hard lumps and clusters and shall dispense readily under any conditions suitable for paint striping. They shall pass the free flow –test.

5.3.4 **Test Methods:** The specific requirements shall be tested with the following method:

(i) **Free Flow Test :** Spread 100 grams of beads evenly in a 100 mm diameter glass dish. Place the dish in a 250 mm inside diameter desiccator which is filled within 25 mm of the top of a desiccator plate with sulphuric acid water solution ( specific gravity 1.10). Cover the desiccator and let it stand for 4 hours at 20 to 29 degree C. Remove sample from desiccator, transfer beads to a pan and inspect for lumps or clusters. Then pour beads into a clean, dry glass funnel having a 100 mm stem and 6 mm orifice. If necessary, initiate flow by lightly tapping the funnel. The glass spheres shall be essentially free of lumps and clusters and shall flow freely through the funnel.

(ii) The requirements of gradation, roundness and refractive index of glass beads and the amount of glass beads in the compound shall be tested as per BS 6088 and BS 3262 (Part I).

(iii) The Contractor shall furnish to the Employer a copy of certified test reports from the manufacturer of glass beads obtained from a reputed laboratory showing result of all tests  
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specified herein and shall certify that the material meets all requirements of this Specification. However, if so required, these tests may be carried out as directed by the Engineer.

**5.3.5 Application Properties of Thermoplastic Material** The thermoplastic material shall readily get screeded/extruded at temperatures specified by the manufacturers for respective method of application to produce a line of specified thickness which shall be continuous and uniform in shape having clear and sharp edges.

The material upon heating to application temperatures, shall not exude fumes, which are toxic, obnoxious or injurious to persons or property.

**5.3.6 Preparation:** The material shall be melted in accordance with the manufacturer's instructions in a heater fitted with a mechanical stirrer to give a smooth consistency to the thermoplastic material to avoid local overheating. The temperature of the mass shall be within the range specified by the manufacturer, and shall on no account be allowed to exceed the maximum temperature stated by the manufacturer. The molten material should be used as expeditiously as possible and for thermoplastic material which has natural binders or is otherwise sensitive to prolonged heating, the material shall not be maintained in a molten condition for more than 4 hours. After transfer to the laying equipment, the material shall be maintained within the temperature range specified by the manufacturer for achieving the desired consistency for laying.

**5.3.7 Application :-**

5.3.7.1 Clause 803.6 Shall apply. Marking shall be done by machine. For locations where painting cannot be done by machine, approved manual methods shall be used with prior approval of the Engineer. The contractor shall maintain control over traffic while painting operations are in progress so as to cause minimum inconvenience to traffic compatible with protecting the workmen.

5.3.7.2 The thermoplastic material shall be applied hot either by screeding or extrusion process. After transfer to the laying apparatus, the material shall be laid at a temperature within the range specified by the manufacturer for the particular method of laying being used. The paint shall be applied using a screed or extrusion machine.

5.3.7.3 The pavement temperature shall not be less than 10°C during application. All surfaces to be marked shall be thoroughly cleaned of all dust, dirt, grease, oil and all other foreign matter before application of the paint.

5.3.7.4 The material, when formed into traffic stripes, must be readily renewable by placing an overlay of new material directly over an old line. Such new material shall so bond itself to the old line that no splitting or separation takes place.

5.3.7.5 Thermoplastic paint shall be applied in intermittent or continuous lines of uniform thickness of at least 2.5 mm unless specified otherwise. Where arrow

### 5.3.8 Properties of Finished Road Marking:

5.3.8. 1 The strip shall not be slippery when wet.

5.3.8. 2 The marking shall not lift from the pavement in freezing weather.

5.3.8.3 After application and proper drying, the strip shall show no appreciable deformation or discolouration under traffic and under road temperatures upto 60° C.

5.3.8. 4 The marking shall not deteriorate by contact with sodium chloride, calcium chloride or oil drippings from traffic.

5.3.8 5 The strip or marking shall maintain its original dimensions and position. Cold ductility of the material shall be such as to permit normal movement with the road surface without chopping or cracking.

5.3.8 6 The colour of yellow marking shall conform to IS Colour No. 356 as given in IS: 164.

**5.3.9 Measurement for Payment** The painted marking shall be measured in “**Square Meter**” of actual area marked (excluding gaps, if any).

## 6. EMBANKMENT CONSTRUCTION (BERM FILLING)

6.1 **General** Clause 305 shall apply.

6.2. **Description** These specifications shall apply to the construction of embankments including sub-grades, earthen shoulders and miscellaneous backfills with approved material obtained from approved source, including material from roadway and drain excavation, borrow pits or other sources. All embankments sub- grades, earthen shoulders and miscellaneous backfills shall be constructed in accordance with the requirements of these specifications and in conformity with the lines, grades and cross sections shown on the drawing or as directed by Engineer-in –Charge.

6.3 **Materials and General Requirements** Physical Requirements : The materials used in embankments sub-grades, earthen shoulders and miscellaneous backfills shall be soil, moorum, gravel, reclaimed material from pavement ,fly ash, pond ash,a mixture of these or any other material as approved by Engineer-in –Charge. Such materials shall be free fo logs, stumps, roots, rubbish or any other ingredient likely to deteriorate or aggett the stability of the embankment.

The following types of material shall be considered unsuitable for embankment :

- a) Materials from swamps, marshes and bogs;
- b) Peat, log, stump and perishable material; any soil that classifies as OL,LI,LH or Pt in accordance with IS : 1948;
- c) Materials susceptible to spontaneous combustion;

- d) Materials in a frozen condition;  
e) Clay having liquid limit exceeding 50 and plasticity index exceeding 25; and f) Materials with salts resulting in leaching in embankment.

Ordinarily, only the materials satisfying the density requirements given in the table below shall be employed for the construction of the embankment and the sub grade.

S. No.	Type of Work	Maximum laboratory dry unit weight when tested as per IS: 2720 (Part 8)
1)	Embankments up to 3 m height, not subjected to extensive flooding	Not less than 15.2 kN/Cu.m
2)	Embankments exceeding 3 m height, or embankments of any height subject to long periods of inundation	Not less than 16 kN/Cu.m
3)	Subgrade and earthen shoulders/verges/backfill	Not less than 17.5 kN/Cu.m

#### 6.4 General Requirements

The materials for embankment shall be obtained from approved sources with preference given to acceptable materials becoming available from nearby roadway excavation under the same Contract. The work shall be so planned and executed that the best available materials are saved for the subgrade and embankment portion just below the sub grade.

#### 6.5 Compaction Requirements

The contractor shall obtain representative samples from each of the identified borrow areas and have these tested at the site laboratory following a testing programme approved by Engineer-In –Charge. It shall be ensured that the subgrade material when compacted to the density requirements as in Table below shall yield the specified design CBR Value of the sub-grade.

S. No.	Type of Work/material	Maximum laboratory dry unit weight when tested as per IS: 2720 (Part 8)
1)	Subgrade and earthen shoulders	Not less than 97%
2)	Embankment,	Not less than 95%
3)	Expansive Clays a) Sub grade and 500 mm Portion just below the subgrade b) Remaining portion of embankment	Not allowed 90-95%

The Contractor shall at least 7 working days before commencement of compaction submit the following to the Engineer-In –Charge.

- i) The values of maximum dry density and optimum moisture content obtained in accordance with IS : 2720 (Part 8), appropriate for each of the fill material he intends to use.
- ii) A graph of dry density plotted against moisture content from which each of the values in (i) above of maximum dry density and optimum moisture content were determined.
- iii) The maximum dry density and optimum moisture content approved by the Engineer-In-Charge form the basis for compaction.

## **6.6 Construction Operations**

As per Section 305.3 of MORT&H Specifications (Fifth revision)

### **7. Measurement for payment:**

The work shall be measured in **Cum** as specified in Schedule -A' of tender documents. Suitable arrangement shall be made by the contractor to facilitate measurement. The complete expenditure on these arrangement shall be borne by the contractor.

Contractor shall arrange labour and other tools required for taking the measurements. Contractor shall not be entitled for any extra payment on this account. In case the contractor or his accredited representative fails to report for taking joint measurements at the appointed date and time, as intimated by the Engineer-in-Charge in writing, the measurements shall be taken by the Engineer-in- Charge ex-parte without presence of contractor or his accredited representative and measurement thus taken shall be final and binding on the contractor.

**8. Rate for Premixed Bituminous Material** The contract unit rate for the work shall be payment in full for carrying out the required operations including full compensation for, but not necessarily limited to:-

- i) Making arrangement for traffic as per Clause 112 of MoRT&H Specifications except for construction of diversion.
- ii) Preparation of the surface to receive the material.
- iii) Providing all materials to be incorporated in the work including arrangement for the stock yards, all royalties, fees, rents where necessary and all leads and lifts;
- iv) Mixing, transporting, laying and compacting mix, as specified including all wastage in cutting joints.
- v) All labour, tools, equipments, plant including installation of Hot Mix Plant, power supply units and all machinery incidental to complete the work to the specification including arrangement for weighing.

vi) Carrying out the work in part widths of the road where directed. vii) Carrying

out all tests for control of quality; and

viii) The rates quoted by the contractor in Schedule -A' is inclusive of cost of bitumen @ 5.4 percent by weight of total mix being issued under schedule -B'. The variation in actual percentage of bitumen used will be assessed and the payment adjusted plus and minus accordingly. Recovery of Schedule -B' stores as per rate mentioned in the tender document will be effected from the payment due to the contractor.

ix) The rates are to include for all necessary testings, mix design weighment, transporting and testing of samples, and cores. The contractor shall make all required facilities for carrying, out different tests at the work site. In case of specific tests viz soundness, stone polishing etc, testing shall be arranged by contractor at his expense from out side laboratories as approved by the OC contract.

x) The cost of all plant and laying trials as specified to prove the mixing and laying is deemed to be included in the contractor's rate for the material.



**VOL-VI**

**INSTRUCTIONS TO BIDDERS**

**FOR E-TENDERING**

## INSTRUCTIONS TO BIDDERS FOR E-TENDERING

1. Tender documents consisting of Instruction to Tenderers, special condition of Contract, General Condition of Contract, Technical specifications, schedule of quantities of work, etc, can be downloaded from the website [www.headwaysip.com](http://www.headwaysip.com) from **20<sup>th</sup> Dec 2021 (10:00 hrs) to 30<sup>th</sup> Dec.2021 (upto 10:00 hrs).**

Tender No.	_____/TTUPL/2021
Name of Work	<b>Resurfacing / Renewal and Maintenance works of Ujjain – Nagda road (SH-17), Section - 1 (Part of Ujjain – Jaora Road)</b> <b>(Providing of bituminous concrete including cleaning of road surface and applying tack coat for resurfacing works, repair of sub base if any required, berm filling on both side and center/edge line marking with thermoplastic paint)</b>
Estimated Cost	₹ 378.00 Lakhs
Cost of Tender Document	₹ 10000.00 /-through DD
<b>Earnest Money</b>	₹ 7.74 lakhs through Bank Guarantee/DD Tender
Processing Fee	₹ 5000.00 exclusive of all taxes and duties (Non-refundable) /-through DD
Date of Sale (Online)	From 10 <sup>th</sup> Feb. 2023 1000 hrs. to 24th Feb. 2023 (up to 1000 hrs.)
Date & Time of submission of tender	24th Feb. 2023 at 1400 Hrs.
Date & Time of opening of tender	2nd March 2023 at 1400 Hrs.

3. Vendors should submit the below mentioned password protected supporting documents (based on their type of Organization) through mail on

[cirpttu@gmail.com](mailto:cirpttu@gmail.com) , [anuj19603@yahoo.co.in](mailto:anuj19603@yahoo.co.in)

- a) PAN Card (for Individuals, Indian and Foreign Bidders)/ TAN Card (for Foreign Bidders).
- b) Certificate of Incorporation (for Indian organizations)/ Memorandum of Articles – MoA (for Foreign Organizations)/ Passport (for Individuals and Foreign Bidders)
- c) VAT or TIN or Service Tax Registration Certificate (for Indian Organizations) / TAN Certificate (for Foreign Organizations)
- d) An Address proof is also to be submitted in case of Individuals.
- e) If the firm is registering in joint venture, they also need to upload deed agreement

**NOTE:** Uploaded copy of all these supporting documents must be self-attested by authorized signatory. Attested signature shall also be verified by Tender Wizard Helpdesk for further authentication process.

4. Tenderer digital signature on the E- Tender form will be considered as their confirmation that they have read and accepted all the conditions laid down in the tender documents, unless specific deviation is quoted in the techno- commercial offer form.

5. E- Tender form is not transferrable and the same is to be submitted with digital signature/ signed & scanned copy by the pre- authorized personnel of the bidder.

Tender is to be submitted through e-tender-mode only at website

<https://www.headwaysip.com> along with scanned copies of credential papers.

6. For what so ever reasons, if any part of TTUPL tender document is not uploaded/submitted by the bidder, other than financial and technical offers and requisite Pre-Qualifying credentials, in that case the missing part of the tender document shall be treated as read and acceptable to bidder.

7. Tenders completed as per instructions will be submitted through e-tendering mode only in the website <https://www.headwaysip.com> as per the prescribed date and time mentioned in the tender notice and tender will be opened on the prescribed date and time in the presence of tenderers or their authorized representative who may wish to be present. Only one representative of each tenderer, who has submitted the tender, will be allowed.

**VOL-VII**  
**BILL OF QUANTITIES**  
**(PRICE BID)**

**PRICE BID**  
**BILL OF QUANTITY**

(THIS IS THE ONLY DOCUMENT TO BE SUBMITTED ONLINE)

**Name of work: Resurfacing / Renewal and Maintenance works of Ujjain – Jaora road (sh-17)**  
**(providing of bituminous concrete including cleaning of road surface and applying tack coat for resurfacing works, repair of sub base if any required, berm filling on both side and center/edge line marking with thermoplastic paint)**

TOPWORTH TOLLWAY (UJJAIN ) PVT. LTD.					
Estimate for Renewal work Section 1 Ujjain-Nagda Road Project					
S. No	Descriptions	Unit	Rate	Approx. Qty	Amount
1	Providing of Scarification the existing bitumen concrete with the help of milling machine up to 30-40 m and disposing the scarified material to the suitable place as diorected by TTUPL Officials (up to lead of 10 km)	sqm		2310	
2	Providing and applying tack coat with catonic bitumen emulsion (RS-1) using emulsion pressure distributor on the prepared bituminous/granular surface cleaned with mechanical broom andas per relevant clauses of section-503 of specifications. (Page-27) item 5.2 (ii)				
	(ii) @0.30 kg per sqm (dry & hungry bituminous surfaces /granular surfaces treated with primer)	sqm		84700	
3	5.6 Providing and laying <b>bituminous concrete</b> using crushed aggregates of specified grading, premixed with bituminous binder @ 5.4 to 5.6 % of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per clause 507 of specification. Using Drum Mix Plant of appropriate capacity. for Grading II ( 30-45 mm thickness ) with PMB40/NRMB	cum		3080.00	

4	5.4 Bituminous Macadam Providing and laying bituminous macadam using crushed aggregates of specified grading premixed with bituminous binder, transported to site, laid over a previously prepared surface with Electronic Sensor paver finisher to the required grade, level and alignment and rolled as per clauses 501.6 and 501.7 to achieve the desired compaction and as per clause 504 of specifications.				
	(ii) for Grading II (19 mm nominal size) bitumen content 3.5% with bitumen 60/70 (VG 30)	cum		500	
5	Providing and laying <b>seal coat</b> sealing the voids in a bituminous surface laid to the specified levels, grade and cross fall using Type A and B seal coats all complete as per clause 511 of specification.				
	(ii) Case - II : Type B (Providing and laying of premix sand seal coat with HMP of appropriate capacity not less than 75 tonnes/ hours using crushed stone chipping (aggregate shall pass 2.36mm seal and retained to 180 micron sieve) and penetration bitumen of suitable grade all complete as per clause 511 of specification.	sqm			
<b>Total</b>					
GST 18%					
<b>Total</b>					

Total amount in words (Rupees .....  
.....)

**Note:**

1. Quantity shown in Price-Bid (BoQ) is approximate and is inserted as guide only.
2. The rates to be quoted by the tender in this Price Bid (BoQ) shall be deemed to include for the provision of all labour and materials, loading and unloading of materials and transportation if required, tools, plant, equipment and tackle, process operations and specific requirements details in this schedule in the particular specification and elsewhere in this tender documents and for the full, entire and final completion of the work in accordance with the provisions of these tender documents.
3. The rates quoted by the contractor shall be deemed to be inclusive of all taxes (including TDS, GST, Labour Welfare Cess/Tax etc), duties, Royalties, Octroi, State Entry Tax & other levies payable under the respective statutes. No re-imbursement/refund for variation in rates of taxes, duties, royalties, Octroi, State Entry & other levies, and or imposition/abolition of any new/existing taxes , duties, royalties, octroi, State entry Tax & other levies shall be made except as provided in Special Conditions.
4. The rates to be quoted by the tenderer in respect of this work shall be deemed to include for all minor details of construction which are obviously and fairly intended and which may not have been specifically mentioned in the tender documents but which are essential for satisfactory execution and completion work. In case of difference of opinion between the Engineer-in-Charge and the Contractor as to what constitutes a minor detail of construction, the decision of Accepting Officer shall be final and binding.
5. Rates to be quoted by the contractors shall be deemed to include to all items of work as described, specified in particular specification and on drawing.
6. The rates to be quoted by the contractor for various items shall include for—material and labour/Supply and fix, connecting, Jointing, Testing and Commissioning complete unless otherwise specifically mentioned therein.
7. The amount of contract is not firm but shall be treated as the contract sum
8. Measurements of works done shall be as per units of items given in Price Bid (boQ) and this mode of measurement shall take as per Clause 113 of MORT&H Specification for road & bridge works (fifth revision). The rate be quoted considering Clause 114 of MORT&H specification (fifth revision).

9 Unit RM, mm cum, Sqm, Kg and Quintal or Qtl, wherever ,mentioned in the tender documents denotes the unit, Running Metre, Millimeter, Cubic Metre, Square Metre, Kilogram, and Quintal respectively.

10. The works under this contract will be carried out within the working hours as per the directions of Accepting Officer or the officer so detailed by him for administration of this contract.

11. The security will be arranged by the contractor for his personnel and equipment during the execution of work. No compensation will be paid by TTUPL on account of any loss age to personnel, property, veh/eqpt/plant of contractor during execution of work or on any account.

12. Site for execution of work shall be handed over on the date of commencement of the work as indicated in the work order No. 01. In case it is not possible for the department to hand over the entire site on the date of commencement and certain portion of the site is handed over later on then contractor shall make his planning/deployment of resources accordingly and no claims of whatsoever nature on this account shall be entertained.

13. In case of tie in the financial bids, the agency having more turnover (average turnover last three years) will be taken as L1.

**14. It is to certify that I/We before filling & signing this Price Bid have read and fully understood the term & conditions of the tender document and undertake myself / ourselves to abide by them.**

(SIGNATURE) : (NAME) : (SEAL) :