

RAJKOT URBAN DEVELOPMENT AUTHORITY

e - Tender No.RUDA/162/2019-20



Bid Documents For

Third Party Inspection Agency for various projects/works in RUDA area.

VOLUME: I

POST QUALIFICATION CUM TECHNICAL BID

Last date for e-tendering is as under	
1. Downloading of e-Tender documents	28-05-19 to 12-06-19 upto 15.00 hours
2. Pre-Bid meeting	07-06-2019 at 11.30 a.m.at RUDA office
3. Last Date of online submission of e - Tender	12-06-2019 up to 18.00 hours
4. Physical submission of EMD, Tender fee and other documents.	13-06-2019 up to 18.00 hours
5. Opening of online Technical Bid	14-06-2019 at 11.30 Hours onwards
6. Opening of Price Bid (If possible)	Will be intimated
7. Bid Validity	180 Days

2019 - 20

Tenders to be submitted to(Hard copy documents) :

**DIRECTOR (PROJECTS)
RAJKOT URBAN DEVELOPMENT AUTHORITY
SHRI CHIMANBHAI PATEL VIKAS BHAVAN
JAMNAGAR ROAD,
RAJKOT - (GUJARAT)**

RAJKOT URBAN DEVELOPMENT AUTHORITY



INDEX

S.NO.	PARTICULARS
01	Tender Notice
02	Notice to Intending Tenderer
03	General details of work in brief
04	Memorandum of Work
05	Time limit and Contract period
06	Consultancy Fees
07	Conditions of Contract
08	General Conditions of Contract
09	Information regarding consulting firm
10	Affidavit
11	Declaration
12	Important instructions to TPI agency
13	Under taking on Earnest Money surrender
14	Format 1 works data sheet
15	Format 2 CV for Professional Staff
16	Format 3 Composition of the Team Personnel and Task of each Team Member
17	Qualification and marking
18	Terms of reference and scope of TPI

1. Tender Notice

RAJKOT URBAN DEVELOPMENT AUTHORITY

Rajkot Urban Development Authority,
Chimanbhai Patel Vikas Bhavan, Jamanagar Road,
Rajkot. Pin – 360001

Phone : 91-0281-2476874, Fax : 91-0281-2450523, Email : rajurbandev@yahoo.com

Tender Notice

RAJKOT URBAN DEVELOPMENT AUTHORITY invites online tenders

(<https://RUDA.nprocure.com>)

For Third Party Inspection Agency for various project / works in RUDA area.

S.No.	Type of works	Tender Fees	EMD
1	various projects/works	Rs. 11800/-(with 18.0% GST)	Rs. 1,50,000/-

RUDA reserves the right to accept or to reject the application of any of the intending applicants without assigning any reasons thereof.

In case of TPI agency need any clarification required for "(n) Code solutions - A division GNFC Ltd., 403, NFC Info tower, Bodakdev, Ahmedabad - 380054, Gujarat (India) Tel : +91 79 26857316/17/18 Fax : +91 79 26857321 Toll free : 18002331010 (Ext. 501 to 512) Email : nprocure@gnvc.net Web : www.nprocure.com

DIRECTOR (PROJECTS)
RAJKOT URBAN DEVELOPMENT AUTHORITY
SHRI CHIMANBHAI PATEL VIKAS BHAVAN
JAMNAGAR ROAD,
RAJKOT - (GUJARAT)

RAJKOT URBAN DEVELOPMENT AUTHORITY

2.0 NOTICE TO INTENDING TENDERER (INFORMATION TO TENDERER)

1. Tenders are invited on behalf of the RAJKOT URBAN DEVELOPMENT AUTHORITY, for the work mentioned as under Empanelment of Third Party Inspection Agency for various projects/works of the Road works in RUDA area.

2. **Qualification Criteria:**

The agency shall submit the necessary attested copy/copies of documents that fulfill qualification criteria as detailed below along with the tender. The agency who is not capable of meeting requirements listed below shall not be qualified for the works.

(a) Average annual turnover of last 3 financial years shall be at least **Rs. 3.00 Crore** in Third Party Inspection, Project Management Consultancy, Engineering Consultancy jobs only.

(b) Experience of having successfully completed *similar* works during last **Five years** ending on **31.03.19** as per the following.

Similar works means, Third Party Inspection, Project Management Consultancy and Engineering Consultancy jobs of the structures like Road works.

(c) **Three** similar completed works each costing not less than the amount equal to = **Rs. 15.00 Crores**

OR

Two similar completed works each costing not less than the amount equal to **Rs.20.00 Crores**

OR

One similar completed works costing not less than the amount equal to **Rs. 30.00 Crores**

Following enhancement factors will be used for the cost of works executed and the financial figures to a common base for value of the works completed.

Year	Multiplying factor
(2018-19)	1.0
(2017-18)	1.1
(2016-17)	1.21
(2015-16)	1.33
(2014-15)	1.46

Applicant shall indicate actual figures of cost and amount for the works executed by them in the schedule without accounting for the above mentioned factors

3. The work is to be carried out as described under memorandum of works specified in this tender document and requires to be completed within a time specified in the work order as well as the time mentioned in the tender documents.
4. Tenderer shall get acquainted with the Project conditions sufficiently in advance of the date fixed for submission of, the tender and shall have satisfied himself as to the nature of work to be executed, The tenderer shall be deemed to have full knowledge of all the relevant engineering documents, existing site conditions etc. whether he inspects them or not.
5. Tenderer shall submit his tender in ONLINE & PHYSICAL format as described under
 - EMD and Tender fee : On line Data Entry and Instruments in Physical
 - Technical Bid : as (stated under para) 6 (b); On line and physical
 - Price bid : On line Only

6 (a) COVER-1: EARNEST MONEY DEPOSIT

The tenderer shall be submit Earnest Money Deposit of **Rs. 1,50,000/-** and tender fee **Rs.11800/-** on the name of "RAJKOT URBAN DEVELOPMENT AUTHORITY" payable at RAJKOT in form of **DD only** of Nationalized / Schedule Bank. **The Earnest Money in the form of Cheque/FDR/Bank Guarantee shall not be accepted.**

(b) COVER-2 : QUALIFICATION CUM TECHNICAL BID DOCUMENTS

1. Application letter/Forwarding letter showing the details of documents submitted on company's letter head.
2. Post qualification cum technical bid duly signed
3. Information regarding firm (refer format) along with the supporting documents in order like registration with various organizations, company's establishment details (types of company / year of establishment / years of experience / registration / partnership deed), power of attorney holder / authorized representative for signing tender documents, PF registration, IT registration with PAN number, Service tax registration, Details regarding company's Bankers, ISO certification/accreditations, annual financial turnover of last three years prepared and attested by Chartered Accountant (copy balance sheet, IT returns,

audit report, Profit & Loss account), Black listed / abandoned work / litigation history etc.

4. Affidavit as per format given on stamp paper of Rs. 100 (refer format).
5. Declaration form on stamp paper of Rs.100 (refer format).
6. Works considered by the tenderer for post qualification criteria with full details of works (refer format). Attested copies of certificates from head of the office concerned for completion of the works.
7. List of the works already completed for the works which are not considered for post qualification but executed (refer format). Attested copies of certificates from head of the office concerned for completion of the works.
8. List of the works on hand along with attested copies of work orders, interim certificates if any shall also be attached as a supporting documents (refer format).
9. Passport size photographs of all the partners (in case of partnership firm) and the person who is holding the power of attorney for signing the tender to be fixed on relevant page of the post qualification cum technical bid volume.
10. Details regarding Technical establishment/staff with their names, qualifications, experience, bio-data, set-up, key personnel etc. TPI agency shall submit the information of the staff establishment to be deployed for this work also (refer format).
11. Based on the scope of work described in this tender, agency may also prepare and submit responsibilities proposal covering methodology work plan to execute their work and different tasks involved in this job.
12. Any other information considered necessary but not included above.

(c) COVER - 3 MAIN TENDER COVER

The above said TWO sealed covers (i.e. Cover-1 & 2) shall be placed in Cover-3 with the name of work written outside the cover as "**Empanelment of Third Party Inspection Agency for various projects/works in RUDA**" are name and address of the tenderer, tender notice number etc and to be submitted in physical format to the Director (Projects), RAJKOT URBAN DEVELOPMENT AUTHORITY, on or before the date mentioned under tender notice through Post/courier/Hand Deliver. **Tenders received after the time and the date specified in the tender notice will not be opened and will stand rejected.**

7. Submission of a tender by the agency shall mean that, he has read tender notice and contract documents and has made himself aware of the scope of the work to be done and conditions that may be required by him in carrying out the work and of local conditions and laws and by laws of the Government, RAJKOT URBAN DEVELOPMENT AUTHORITY and other factors bearing influence on the execution and cost of the works.

8. Tender shall be stands rejected if:

1. The tenderer proposed any alternation in the work specified or any conditions or corrections made in the technical / price bid.
2. Any eraser is made in the tender unauthenticated or any page or pages is/are removed or replaced.
3. The tenderer shall submit the tender which satisfied each and every conditions laid down in the Tender notice and documents, failing which the tender will be liable for rejection.
4. Stipulates the validity period less than what is stated in the form or tender deviating from terms and condition of contract.
5. Does not quote his rates inclusive of income tax, Central taxes or any other taxes (except service tax) in his rates.
6. Does not disclose the full names and address of all his partners in the case of partnership firm.
7. Does not fill in and sign the tender form as well as the bill of quantities and rates, annexure, specification etc.
8. Does not pay the Earnest Money Deposit/Tender fee by Demand Draft.
9. Does not submit the tender before the stipulated time and specified date in the Account Office as directed.
10. Does not quote the rates for each part of the Price-bid.
11. Does not attach the sufficient documents mentioned in the post qualification cum technical bid.

9. **GENERAL**

1. All corrections, additions or posted slips to be initialed by the tenderer.
2. All page of tender documents should be initialed by the tenderer.

3. The tenderer shall submit the tender which satisfies each and every conditions laid down in this notice and tender documents failing which the tender is liable for rejection.
4. Notice of inviting tenders shall be a part of the contract documents.
5. Acceptance of tender/quotation will rest with the competent authority of RAJKOT URBAN DEVELOPMENT AUTHORITY who does not bind himself to accept the lowest and reserves the right to accept or to reject any or all quotations/tenders and no reasons will be given for acceptance or rejection thereof.
6. Tender once accepted shall be binding on the TPI agency even if the formal agreement is not signed.
7. Tender once offered cannot be withdrawn except with the permission of head of the concerned department, RAJKOT URBAN DEVELOPMENT AUTHORITY,
8. The successful agency shall require entering in to agreement with RAJKOT URBAN DEVELOPMENT AUTHORITY after receiving the work order for the said work from RUDA.
9. It will be presumed that prices quoted are inclusive of the all taxes and no claim will be entertained for payment of extra taxes on the bills submitted by them except Service Tax.
10. The price bid will be opened only after qualification process.
11. **RUDA intends to make a panel of bidders at the approved lowest rates. RUDA reserves right to entrust any work to any bidders of the panel**

SIGNATURE OF THE TENDERER
Address
Date

Director (Projects)
RUDA.RAJKOT

3.0 GENERAL DETAILS OF WORK IN BRIEF

1. NAME OF WORK :

Third Party Inspection Agency for various projects/works in RUDA Area

2. Amount of Earnest Money Deposit : Rs. 1,50,000/-
3. downloading of tender documents : 12.06.2019 15.00 hrs
4. Last date for submission of tender documents (on line) : 13.06.2019 18.00 hrs
5. Concern office : Director (Projects), Rajkot Urban Development Authority, Shree Chimanbhai Patel Vikas Bhavan, Jamanagar Road, Rajkot.
6. Tender cover to be superscripted as:
- Empanelment of Third Party Inspection Agency for various projects/works in RUDA Area
 - Tender Notice No. RUDA/162/2019-20
 - Name and Address of Tenderer
8. Filled tender to be sent to **Director (Projects)**, Rajkot Urban Development Authority , Shree Chimanbhai Patel Vikas Bhavan, Jamanagar Road, Rajkot, RAJKOT
9. Pre bid Conference On Date. 07.06.2019 at 11.30 Hrs In RUDA Office.

SIGNATURE OF THE TENDERER:

Address

Date

Director (Projects)

RUDA.RAJKOT

4.0 MEMORANDUM OF WORKS

1. NAME OF WORK

Third Party Inspection Agency for various projects/works of the Road works in RUDA Area

2. Security Deposit

a) Initial 5 % of the contract value by DD/F.D. from the Nationalized / Scheduled Bank payable at RAJKOT Only

b) Remaining 5 % shall be deducted from Running account bill

c) Total Security Deposit - 10 % of contract value

3. Compensation for delayed work : 0.1% of work order Cost per day
subject to maximum of 10% of the
work order value of work

4. Tender validity period : 180 days from the last date of
submission of tender

5. Schedule for works

Contract Period : 36 Months

SIGNATURE OF THE TENDERER:

Address

Date

Director (Projects)

RUDA.RAJKOT

5.0 TIME LIMIT AND CONTRACT PERIOD

Time limit for contract period shall be **3 years** from the date of work order. However RUDA/Client may extend the time period up to completion of the contractor's work. No extra payment or rise in fee shall be paid for extension of time.

6.0 FEES AND PAYMENT

- Charges of TPI agency shall be on % basis of the tendered amount of the work as the case may be. Including all site/quarry / factory visits.
- Payment shall be excluding the Service tax which shall be paid as extra on fee at the rate prevailing from time to time of the payment and as per the Government rules
- Bidder/TPI agency shall make their own arrangement for to and fro for site visit, factory visit within Gujarat. Outside visit shall be for testing and inspection of engineering materials to be used for the project, charges for travel expenses, district allowances, out of pocket expenses, lodging, boarding etc shall be borne by the TPI agency.
- All payment shall be done to TPI agency through local cheque only.
- TPI agency shall submit their bill per month per work to RUDA

7.0 CONDITIONS OF CONTRACT

Definitions,

Unless the context otherwise required, the following terms whenever used in this tender have the following meanings.

- (a) "Applicable law" - means the laws and any other instruments having the force of law in India (as they may be issued and in force from time to time) to which these conditions of Contract are attached together.
- (b) "Government" - means the Government of India, Government of Gujarat.
- (c) "Services" - means the work to be performed by the Agency/TPI agency as described in the tender hereto.
- (d) "RUDA, Client, , Employer" means, RAJKOT URBAN DEVELOPMENT AUTHORITY, having its office located at RAJKOT.
- (e) "Party" means the client or the Bidder/Agency/TPI agency/TPI agency/firm as the case may be and parties mean both of them.
- (f) "TPI"- means Third party inspection agency and successful tenderer and empanelled by the client
- (g) "Engineer in charge" - Client's authorized representatives /Director (Projects)

- (h) "Contractor" - A person or agency/firm to whom Client has awarded the execution of work of the project on which TPI has to perform their work and duties

Taxes and duties

The RUDA will make the payments after deducting the taxes from the bill, service tax as per the prevailing rates from time to time shall be paid to the TPI agency.

TPI agency shall pay all other taxes, duties, fees and other imposition as may be levied under the applicable law from time to time. Overall responsibility regarding any type of taxes, levies, etc. shall be on part of TPI agency.

Force Majeure

Definition,

- (a) For the purposes of this tender, Force Majeure means an event which is beyond the reasonable control of a party, and which makes a party's performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible in the circumstances, and includes, but is not limited to, war, riots, civil disorder, earthquake, fire explosion, storm, flood or other adverse weather conditions, strikes, lockouts or other industrial action (except where such strikes, lockouts or other industrial action are within the power of the Party invoking Force Majeure to prevent), confiscation or any other action by the Government Agencies.
- (b) Force Majeure shall not include (i) any event which is caused by the negligence or intentional action of a Party nor (ii) any event which a diligent party could reasonably have been expected to both.
- (c) Force Majeure shall not include insufficiency of funds or failures to make any payment required hereunder.

Measures to be taken:

- (a) A party affected by an event of Force Majeure shall take all reasonable measures to remove such party inability to fulfill its obligations hereunder with a minimum of delay.
- (b) A Party affected by an event of force Majeure shall notify the other party of such event as soon as possible and in any event not later than 14 days following the occurrence of such event providing evidence of the nature and course of such event and shall similarly give notice of the restoration of normal condition as soon as possible.
- (c) Party shall take all responsible measures to minimize the consequences of any event of forced Majeure.

Extension of time

Any period with a party shall complete any action or task shall be extended for a period equal to the time during which such party was unable to perform such action as a result of forced Majeure.

Consultation

Not later than 30 days after the TPI agency as the result of an event of Forced Majeure have become unable to perform a material portion of the services, the party shall consult with each other with a view to agreeing on appropriate measures to be taken in their circumstances.

Suspension

The RUDA may by written notice of suspension to the TPI agency, suspend all payments hereunder if the TPI agency fails to perform any of their obligations including carrying out of the services provided that such notice of suspension (i) shall specify the nature of the failure and (ii) shall request the TPI agency to remedy such failure within the period not exceeding 30 days after receipt by the TPI agency of such notice of suspension.

Termination

The RUDA may take action by not less than 30 days written notice of termination to the TPI agency. Such notice to be given after the occurrence of any of the events specified in para (a) to (e) of these clause terminate this contract.

- a. If the TPI agency fails to remedy a failure in the performance of their obligations hereunder as specified in a notice of suspension, pursuant to clause here in above within 30 days of receipt of such notice of suspension or within such further period as the RUDA may have subsequently approved in writing.
- b. If the TPI agency become (or if the TPI agencies consist more than one entity, if any of their members becomes) insolvent or bankrupt or enter into any agreement with their creditors for relief of debt or take advantage of any law for the benefit of the debtors or go into liquidation or receivership whether compulsory or voluntary.
- c. If the TPI agency submit to the RUDA a statement which has a material effect on the right, obligations or interests of the RUDA and which the TPI agency know to be false.
- d. If as a result of forced Majeure TPI agency are unable to perform the material portion of the service for a period of not less than 60 days or
- e. If the RUDA, in its sole discretion and for any reason whatsoever decides to terminate the TPI agency.

OBLIGATIONS OF THE TPI AGENCY - General Standard of performance

The TPI agency shall perform the Services and carry out their obligations with all due diligence, efficiency and economy, in accordance with generally accepted professional techniques and practices, and shall observe sound management practices and employ appropriate advanced technology and safe and effective equipment, machinery, materials and methods. The TPI agency shall always act, as faithful advisers to the RUDA, and shall at all times support and safeguard the RUDA's legitimate interests.

Law Governing Services

The TPI agency shall perform the services in accordance with the Applicable law. The RUDA shall advise the TPI agency in writing of relevant local customs and the TPI agency shall after such notifications, respect such customs.

Documents related to project – RUDA property

All the data, reports, drawings etc. generated, prepared and submitted by the TPI agency as a part of this job shall remain property of RUDA. Documents prepared by the TPI agency shall be property of the RUDA. All plans, drawings, specifications, designs, reports and other documents prepared by the TPI agency in performing the services shall become and remain the property of the RUDA and the TPI agency shall not later than upon termination or expiry of this contract, deliver all such documents to the RUDA together with a detailed inventory thereof. The TPI agency may retain a copy of such documents. Restrictions about the further use of these documents, if any, shall be specified in the schedule of contract.

8.0 GENERAL CONDITIONS OF CONTRACT

All conditions given in the clauses appearing herein after shall be deemed to form part of the contract and shall be deemed as supplementary to the same. These conditions shall be binding on the TPI agency in the same manner as other terms and conditions in this contract.

Clause 1

The party whose tender may be accepted (therein after called the TPI agency, which Expression shall unless excluded by or repugnant to the context include his heirs, executors, administrators and assignees) shall (within 10 days of the receipt by him the written Intimation regarding acceptance of his/their tender) deposit with Engineer in charge in D.D/FD security deposit to The RAJKOT URBAN DEVELOPMENT AUTHORITY, RAJKOT. In sums sufficient to make up the full security deposit, Specified in the tender and sign the contract agreement. Where after work order for commencing extension of the work so contracted will be given by client. If tenderer

fails to deposit initial 5 % security deposit within 15 days from the date of work order, he has to pay penalty at the rate of 0.065% per day of the amount of security deposit if the amount of the security deposit is not paid, the contract already accepted shall be considered as cancelled and his EMD shall stand forfeited. In case of other TPI agencies who's tender is not accepted, Earnest money deposit lodged by him shall be refunded by the client after acceptance of the tender and receipt of security deposits from the TPI agency whose tender is accepted. The Security deposit of the TPI agency whose tender is accepted shall be refunded, after final bill paid to the TPI agency and after deducting dues, if any, liable to be recovered from the TPI agency under the terms and conditions of this contract. Security deposit will be released after successful completion of the whole project.

Clause 2

In any case in which under any clause or clauses under this contract, the TPI agency shall have tendered himself liable to pay compensation amounting to the whole of this security deposit whether paid in one sum or deposited by installments or in the case of abandonment of the work owing to serious illness or death of the TPI agency or any of the following courses, as he may deem best suited to the interest of the work.

(a) To rescind the contract (of which recession notice in writing to the TPI agency under the hands of the client shall stand conclusive evidence and in that case security deposit of the TPI agency shall stand forfeited and be absolutely at the disposal of client.

(b) To carry out the works, or any part of the work debiting to the TPI agency, the cost of such work (as to the correctness of which cost and price the certificate of Engineer in charge shall be final and conclusive against the TPI agency and crediting him with the value of the work done, in all respects in the same manner and at the same rates as if it had been carried out by the TPI agency under the terms of this contract and in that case the certificate of the Engineer in charge as to the value of the work one shall be final and conclusive against the TPI agency.

(c) If the TPI agency is an individual or proprietary concern and the individual or the, proprietor dies, then unless the accepting authority is satisfied that legal heirs representatives of the individual TPI agency or of proprietary concern, are capable of carrying out and complete the contract, the accepting authority shall be entitled to cancel the contract as to its in completed part by forfeiting the security deposit without RUDA being in any way liable to payment of any components to heirs of the deceased TPI agency on accountant of the cancellation of the contract. The decision of the client that the legal representatives.

Clause 3

The TPI agency shall not assign or sublet without written approval of the Engineer in charge, the work contracted and if the TPI agency shall assign or sublet his contract or attempt to do so, or become insolvent or make any composition with his creditors or, attempts to do, for the engineer in charge may, by notice in writing, rescind the Contract. Also, if any bribe, gratuity gift, loan, perquisite, shall either directly or Indirectly be given, promised, or if offered by the TPI agency, or any of his servants or agents to any public office or person shall become in any way, directly or indirectly interested in the contract the engineer in charge by giving notice in writing rescind the contract.

In the event of contract being rescinded, the security deposit of the TPI agency shall thereupon stand forfeited and absolutely at the disposal of the client and the same consequences shall clause hereof and in addition, the TPI agency shall not be entitled to recover or be paid for any work for actually performed under the contract.

Clause 4

The time allowed for carrying out the work as entered in the tender shall strictly be observed by the TPI agency and shall be reckoned the date on which the order to commence work is given to the TPI agency.

Clause 5

If the progress of any particular portion of the work is unsatisfactory, the Engineer in charge shall notwithstanding general progress of the work is satisfactory in accordance with clause be entitled to take action under cl. 2(a), 2(b) and 2(c) above after giving 10 day's notice in writing to the TPI agency. The TPI agency will have no claim for compensation for any loss, sustained by him owing to such action.

Clause 6

If at any time after the execution of the contract documents, the engineer in charge shall for any reason whatsoever require the whole or any part of the work as specified in the tender, to be stopped for any period or shall not require the whole or part of the work to be carried out at all or to be carried out by the TPI agency, RUDA shall give notice in writing of this fact to the TPI agency who shall thereupon suspend or stop, the work totally/partially, as the case may be. In any such case, except as provided hereunder, the TPI agency shall have no claim to any payment or compensation whatsoever on account of any profit or advantage which he might have derived from the execution of the work in full but which he did not so derive in consequence of the full amount of the work not having been carried out, or on account of any loss that he may be put to on purchase or for unemployment of staff recruited by him, he shall not also have any claim for

compensation by reason of any alteration having been made in the original conditions of contract and instructions involving any curtailment of the work from that originally contemplated.

Clause 7

In the event of any deficiency in service from TPI agency, the contract shall be rescind with immediate effect and the security deposit of the TPI agency shall thereupon stand forfeited and absolutely at the disposal of the client.

Clause 8

Under no circumstances whatsoever, shall the TPI agency be entitled to any compensation from client on any account, unless the TPI agency shall have submitted a claim in writing to the Engineer in charge within one month of the cause of such claim occurring.

Clause 9

All sums payable by a TPI agency by way of compensation under any of the conditions shall be considered as a reasonable compensation to be applied to, as required by the client, shall be without reference to the actual loss, damage sustained and whether any damage has or has not been sustained.

Clause 10

The expression "works" or "work" where used in these condition shall, unless there be something in the subject or context repugnant to such construction be construed to mean the work or works, contracted to be executed under or in virtue of the contract, whether temporary or permanent, and whether original, altered, substituted or additional.

Clause 11

The TPI agency shall not enter upon or commence any portion of work except with the written authority and instructions of the engineer in charge or of his subordinate in charge of the work. Failing such authority the TPI agency shall have no claim to ask for payment for such work done if any.

Clause 12

All works to be executed under contract shall be executed under the directions and subject to the approval in all respects of the Engineer in charge or his authorized agent who shall be entitled to direct at what point or points and in what manner they are to be commenced, and from time to time throughout the construction period.

Clause 13

Payment to TPI agency shall be made by cheque drawn on any Bank at RAJKOT

Clause 14

If the TPI agency shall desire an extension of the time for completion of the work on the ground of his having been unavoidably hindered in its execution or on any other ground, he shall apply in writing to the engineer in charge within 30 days from the date on which he was hindered as aforesaid or on which the cause for asking for extension occurred. The engineer in charge if in his opinion considers that there are reasonable grounds for granting an extension, may refer to client for considering grant of such extension being necessary or proper. The decision of the client in this matter shall be however final.

Clause 15

Any TPI agency who does not accept all these conditions as above shall not be allowed to tender this work.

Clause 16

Disputes if any shall be discussed and mutually settled. In case of disagreement, the same shall be referred to Chief Executive Authority RUDA. If the said dispute is not solved, the same shall be referred to the Court subject to Rajkot Jurisdiction only.

Clause 17

If the TPI agency fails to complete the work, the Chief Executive Authority RUDA, take actions in accordance to clause 2(a) or (b) or (c) of the Contract, in such cases, the remaining work has to be carried out by advertising the tender for the remaining work and the whole administrative process right from inviting the tenders to finalizing the tender etc. will have to be carried out by RUDA.

For this, repetition a fixed amount of Rs.25,000/- shall be recovered from the original TPI agency towards the cost re-advertisement and other administrative charges incurred by the department in finalizing the contract for the remaining work. In case however a separate advertisement is issued for a single work, actual cost of advertisement shall be recovered. Such recovery shall be in addition to the recoveries to be made under clause - 2 of such other relevant clauses.

Clause 18

No price escalation shall be paid by RAJKOT URBAN DEVELOPMENT AUTHORITY in any case.

SIGNATURE OF THE TENDERER:

Director (Projects)

Address

RUDA.RAJKOT

Date

9.0 INFORMATION REGARDING CONSULTING FIRM

1	Name	
2	Address with mail id	
3	Phone/fax/mobile	
4	Contact person details	
5	Registration No	
6	Type of organization Proprietary / Partnership / Private limited / Public limited / Public undertaking etc	
7	Year of establishment	
8	Year of experience	
9	Name and particulars of the authorized representative for the details furnished hereunder/power of attorney holder	
10	PF registration certificate	
11	IT PAN No.	
12	Service tax registration	
13	Name of Bankers with full address	
14	ISO certification/accreditation	
15	Total financial turnover detail for last three years with supporting documentation	
16	Has the applicant or his partner or share holder been black listed in the past by any client.	
17	Details of works if any abandoned by the agency/client	
18	Applicant shall provide information on any history of litigation or arbitration resulting from contract or currently under execution	

10.0 AFFIDAVIT*

1. I/we under signed, do hereby certify that all the statements made in the required attachments are true and correct.
2. The under signed also hereby certifies that neither our firm / agency M/s nor any of its constitute partners have abandoned any work or any contract awarded to us for such works have been rescinded, during last **Five** prior to the date of this application.
3. The undersigned hereby authorized(s) and request(s) any bank, person, firm or Corporation to furnish pertinent information deemed necessary and request by the Department to verify this statement or regarding my(our) competence and general reputation.
4. The undersigned understands and agrees that, further qualifying information may be requested, and agrees to furnish any such information at the request of the client.

*To be submitted on Non Judicial Stamp paper of Rs 100.00 duly signed by authorized Notary

Signed by an authorized PERSON of the Firm/agency

DECLARATION*

1. I/we agree that, the decision of the Rajkot Urban Development Authority in post qualification/selection of applicants will be final and binding to me/us.
2. All the information and data furnished herewith correct to my/our best of knowledge
3. I/we agree that, we have no objection, if inquires are made about our works, its related areas and any other inquiry regarding all details, projects and works listed by us in the post qualification documents at any stage
4. I/we undersigned on behalf of our firm M/s..... hereby give under taking that I/we am/are jointly and severally responsible to meet the liabilities over and above the business of the firm and make good the above financial loss sustained by the Rajkot Urban Development Authority as a result of my/our abandoning the work entrusted to me/us/this firm.

*To be submitted on Non Judicial Stamp paper of Rs 100.00 duly signed by authorized Notary

Signed by an authorized PERSON of the Firm/agency

12.0 INSTRUCTION TO TPI AGENCY

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Specimen Signature of the authorized person of the TPI agency/firm

AFFIX LATEST PASSPORT SIZE PHOTOGRAPH OF ALL PARTNERS IN CASE OF PARTNERSHIP AGENCY.

Specimen Signature of all partners in case of partnership agency

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____

Submission of Registered Agreement is compulsory in case of partnership agency

- 1. The photograph and specimen signature of person will be cross checked, whenever agency/firm received payment from account section of RUDA.
- 2. The specimen signature of the person will be cross checked by Account Department of RUDA, in case of representative of the agency/firm along with letter of authority of a person who signed an agreement, receives payment.

SIGNATURE OF THE TENDERER:

Address

Date

Director (Projects)

RUDA.RAJKOT

13.0 UNDERTAKING ON EARNEST MONEY SURRENDER

I/We hereby agree to abide by and fulfill all the terms and provisions of the conditions of contract annexed thereto as fully applicable, and in default thereof, agree to forfeiture of and pay to the client, the sums of Earnest Money Deposit mentioned in the said conditions.

Receipt No. _____ dated _____ from client in respect of the sum of Rs

EMD in the form of demand draft of Rs..... Bearing datedof Bank drawn in favor

of RAJKOT URBAN DEVELOPMENT AUTHORITY is herewith forwarded representing the earnest money, the full value of which is to be absolutely forfeited to Client, Should I/We not deposit the full amount of security deposit specified in the memorandum, and in accordance with clause of the said conditions, otherwise the said sum of Rs..... shall be refunded.

Place:

Date:

Address:

Signature of the authorized person of the agency/firm

Signed and given in presence of.....

Address: Occupation:

Signature of the witness to the Tendering agency

14.0 Format - 1. Works data sheet

** Use this format for (1) works executed and considered for qualification criteria, (2) works executed but not considered for qualification criteria and (3) works in progress/on hand. Provide data sheet strictly in order as above. For work in progress/on hand, please furnish details like work done up till date and probable date of completion.*

Using the format below, provide information on each assignment for which, legally Contracted either individually as a corporate entity or as one of the major companies, for carrying out services similar to the ones requested under this assignment.

Please provide a copy of certificate from the client or copy of work order from the client. The submitted testimonial MUST contain detail description of work (Scope of Work and TOR) carried out by the agency. Only those documents would be considered for the evaluation for which the documentary proof, i.e. client certificate or work order, have been provided.

Each information provided shall be supported by the certificate from the respective employer incorporating information as prescribed in the table below:

Name of Assignment/job:	Value of the contract (in INR):
Location:	Cost of the project/work for which TPI/PMC service provided(in INR):
Name of Client:	Start date (month/year): Completion date (month/year):
Client Address:	Duration of assignment (months):
Name of Project Consultant:	Approx. value of the services provided by your firm under the contract (in INR):
Name of Contractor:	Total No. of staff-months of the assignment:
Name of associated Consultants, if any:	No. of professional staff-months provided by associated Consultants:
Type of work: TPI/PMC	Name of senior professional staff of your firm involved and functions performed (indicate most significant profiles such as Project Director / Coordinator, Team Leader)
Narrative description of Project	
Description of actual services provided by your staff within the assignment:	

15.0 Format – 2. Curriculum Vitae (CV) for Professional Staff

- (i) Name of Person :
- (ii) Proposed position for this assignment : (Only one Candidate should be nominated for each Position as sought)
- (iii) Designation :
- (iv) Date of Birth :
- (v) No of Years with present Employer :
- (vi) Education :

Name of Degree (Graduate onwards)	College and University	Specialization	Year of Passing

- (vii) Relevant Experience :
Please provide details of relevant assignments, with respect to task assigned for the proposed work. Kindly provide following information for each assignment:

Name of Assignment	Name of Client	Time period	Description about assignment	Your role(Team/ Project leader, Sector Expert)	Time spent

- (viii) Employment Record :
(Starting with present position, list in reverse chronological order, for every employment held.)

Name of Employer	Position held	Duration	Job Responsibility

- (ix) Total No. of Years Experience :

Total No. of years in Consultancy Service	
Total no. of Years in services other than Consultancy services	
Total Experience	

- (x) Certification

I, the undersigned, certify that to the best of my knowledge and behalf, this Bio data correctly describes myself, my Qualifications and my experience.

Signature of Team Member

Date

Note : The CV must be signed by the person whose CV is given. Only those CVs would be considered, which are signed by the concerned persons (Sign of authorized signatory other than the person whose CV is submitted, would not be considered.)

16.0 Format 3 Composition of the Team Personnel and Task of each Team Member

Technical / Managerial Staff

Sr. No	Name of the Member	Proposed Position	Name of Firm	Employment Status (regular/part time / others)	Education Qualification	No. of Years relevant experience

Support Staff

Sr. No	Name of the Member	Proposed Position	Name of Firm	Employment Status (regular/part time / others)	Education Qualification	No. of Years relevant experience

Authorized Signatory

Name and Title of Signatory

Name of Firm

Address

17.0 PQ marking for TPI :

1. Satisfaction of annual turn over criteria - **30 marks**

Average annual turnover of last 5 financial years (ending 31.03.2019) shall be at least equal to Rs. **3.00 crores** as TPI agency. Inspection, Project Management Consultancy, Engineering Consultancy jobs only.

2. Satisfaction of works experience criteria - **35 marks**

(a) Experience of having successfully completed *similar* works during last **Five years** ending on 31.03.2019 as per the following. (Sub marks 20)

Similar works means, **Third Party Inspection jobs, Project Management Consultancy jobs, Engineering Consultancy job of the Structures in Road Works** costing

- (i) Five work of 5.00 crore
- (ii) Three work of 10.00 crore

(b) Experience of having successfully completed *similar* works during last **Five years** ending on **31.03.2019** as per the following. (Sub marks 15)

Three similar completed works costing not less than the amount equal to **Rs.15.00 Crores**

OR

Two similar completed works costing not less than the amount equal to **Rs. 20.00 crores**

OR

One similar completed works costing not less than the amount equal to **Rs. 30.00 crores**

TPI agency shall submit work wise details in prescribed format for *similar works* executed as under for the work considered under post qualification criteria

3. Company's Organization and management structure - **10 marks**

Provide a brief description regarding background of organization, management structure, details of key personnel etc. Parameters covering financial strength (i.e. annual turnover, net worth, cash flow etc.), banking facilities, man-power details of firm and experience of the firm etc.

- Company having experience < 5 5 Marks
- Company having experience > 5 years - 10 Marks

4. Company's professional staff - **25 marks**

The bidder shall provide company's technical staffs details with qualification and experience

Sr.	Title	Qualification and Experience	Marks
1	Technical Personnel -1	Post graduate / Master degree in Civil with at least 10 years or Graduate B.E.(Civil) with at least 15years of relevant experience in project management level. Person have proven management capability as a team leader for leading multi disciplinary teams	7
2	Technical Personnel -1	Degree in Civil with at least 10 years of relevant experience in project management level and execution of works. Person have proven management capability as a team leader.	5
3	Civil Engineer-1 or Structural Engineer -1	Degree in Civil engineering with 10 years experience project works including knowledge of engineering materials testing, study of contract documents, quality control etc	5
4	Civil Engineer-1	Degree in Civil engineering or its equivalent with 5 years experience project works including knowledge of engineering materials testing, study of contract documents, quality control etc	4
5	Civil Engineer-1	Diploma in Civil engineering with 5 years experience project works including knowledge of engineering material testing, study of contract documents, quality control etc	2
6	Civil Engineer-1	Diploma in Civil engineering with 5 years experience project works including knowledge of engineering material testing, study of contract documents, quality control etc	2

(C) Selecting Procedure:

- 1) **Minimum required Technical Score - 80 marks. :** The bidder who score 80% and above marks will only be considered eligible for opening of on-line price bid.
- 2) The offer will be accepted of lowest offering Financial Quote.
- 3) GST will be paid extra on fee as applicable from time to time
- 4) RAJKOT URBAN DEVELOPMENT AUTHORITY reserves all the rights to give work also other than L1 agency if they are agree to work according to approved rate of L1 agency. And also reserves rights of approval / rejection of any TPI tenderers rates.

5) Requirement of following documents

- a) Bank solvency of Rs 25 lacs from Nationalized/Schedule bank
- b) P.F Registration
- c) Professional tax Registration
- d) GST/PAN Number
- e) Registration for consultant from GOG/Local authority

18.0 Terms of reference and scope of TPI for Road works

Scope of Third Party Inspection Agency

(1) General

- TPI agency shall study the tender documents thoroughly including specifications, drawings and bill of quantities and to consent ambiguity if any and report to Engineer in charge.
- TPI agency shall visit the site, examine the works executed / on going / to be executed as per tender specifications and as per best engineering practice, survey data and opine and submit report to Director (Projects) with suggestion and comment for the visit.
- TPI agency shall discuss with contractor about methodology and work plan and shall opine his comment if any.
- TPI agency shall collect the samples of the materials and send the same for testing witness the test in the approved laboratory and approve the materials to be consumed for the work.
- TPI agency shall attend project review meeting and submit the progress report to employer if found necessary.
- TPI agency shall opine regarding excess work, extra items, time limit and other contractual matter to the Engineer in charge.

(2) Inspection

- TPI agency shall visit the site at day to day for each component of the project/Work

(3) During visit

- Review of "SBC" value, witness of sub-base, P.C.C. & R.C.C.
- Checking of mix design, reinforcement, shuttering in line and level with the approved drawing / Standard / Contract specifications / standard engineering practice etc. complete & witnessing concreting including taking concrete slump and concrete cubes at least one set during the concreting.
- During visit, representative of the RUDA may witness the testing, but TPI agency shall witness & carry out the testing and report to Director (Projects) within two days as per the format approved by the RUDA in accordance with relevant IS
- TPI agency shall carry out the testing procedure as per the relevant **IS/MORTH** and as per the condition and specification of tender of the concerned work or as per QAP approved by the Engineer in Charge. IS includes random selection of specimen from the given lot. Representative shall keep necessary IS, tender specification during their site/factory visit
- If the factory / ex works may change during the testing then, TPI agency shall also have to witness test with no extra cost.

(4) Progress Monitoring & Expediting

- Forwarding necessary information and approvals to contractor for the progress of the project.

- Monitoring the progress by verifying the actual job carried out by the contractor and reporting same to the client.
- Highlighting the delays in completion of job
- Advise necessary steps for completing the project in scheduled time.

(5) Validity

- The proposed offer for the work of TPI shall remain valid for 3 (Three) years from the date of work order and without any price escalation.

(6) Frequency of site visit

- Collection of testing materials in presence of TPI agency's representative
- Approval of source of materials from Approved Quarry or any other places
- TPI agency shall take visit to Laboratory for witness test.
- Day to day site visit required by civil engineers / technical staff.

(7) Terms of payment

- All payment shall be done to TPI agency through cheque only.
- TPI agency shall submit their bill per month per work to RUDA
- Service tax shall be paid as extra on fee at the rate prevailing from time to time of the payment and as per the Government rules
- Bidder/TPI agency shall make his own arrangement for to and fro for site visit, factory visit within / Gujarat/India. Outside visit shall be for testing and inspection of engineering materials to be used for the project. Charges for travel expenses, district allowances, out of pocket expenses, lodging, boarding etc shall be borne by the TPI agency.
- All testing and inspection charges shall be borne by the concerned contractor

(8) Security Deposit

- a) Initial 5 % of the contract value by DD/F.D. from the Nationalized / Scheduled Bank in favor of Rajkot Urban Development Authority payable at RAJKOT Only
- d) Remaining 5 % shall be deducted from Running account bill
- e) Total Security Deposit - 10 % of contract value

(9) Compensation for delayed work :

- 0.1% of work order Cost per day subject to maximum of 10% of the work order value of work

(10) Tender validity period :

- 120 days from the last date of submission of tender

(11) Safety provisions

- Advice and Approval of Safety procedures.
- Monitor and supervise the various activities at site for compliance of Safety systems.
- To supervise overall safety at excavation, P.C.C., R.C.C. work and other miscellaneous activities, laying of pipe line and other construction as well as erection and commissioning activity at site. During any execution activity of the project, ensure adherence to the approved Safety Management System.

General procedures of checking

Sr	Particulars	Remarks
1	Inspection of site, Contract documents, drawings, quality assurance plan, special procedure if any	
2	Concrete Mix design, joint records of field survey, overall planning of work, soil investigation, testing, reports review	
3	Planning of entire work, study and review of Bar Chart, CPM, PERT, work/management software systems	
4	Preparation of future visit scheduled for entire span of the project	
5	Foundation work, Sub structures	Checking and confirmation of center line of structure, confirmation of depth, SBC, inspection of strata available, review of test certificates, checking of reinforcement and shuttering, checking of line and level, set procedure for concreting at site as well as batching plant, taking cubes for testing, slump etc
6	Super structures	Review of Drawing/details, periodic checking of structures like raft, columns, walls, slab, staging, shuttering etc review of test certificates, checking of reinforcement and shuttering, staging etc. check line level, procedure for concreting at site as well as batching plant, taking of cubes slumps, etc.
7.	Misc items	Checking as per the tender specifications/standard engineering practice

Frequency of Tests (Civil Works)

Sr	Title	Frequency of Test / Check	Relevant IS Codes
1.	Soil		IS 2720
	a) Core cutter test	<ul style="list-style-type: none"> At every 500 m³ of compacted earth filling for mass filling work 	
	b) Standard Proctor Test	<ul style="list-style-type: none"> Once for each source of earth 	
2.	Coarse Aggregate / Fine Aggregate		
	a) Specific gravity	<ul style="list-style-type: none"> Once or Change in source 	IS 2430 – 1986
	b) Bulkage of Sand	<ul style="list-style-type: none"> In monsoon/Rainy season when concreting is done by volumetric batching this test is to be performed daily and necessary Bulkage corrective to be applied 	
	c) Dry/Loose Bulk density	As and when required	
	d) Silt content in Sand	For each source	
	e) Aggregate impact value	<ul style="list-style-type: none"> If the source explored between 501-1500 cum take one gross sample at each 100 cum. 	
	f) Sieve analysis of aggregate	<ul style="list-style-type: none"> If the source explored between 1501-5000 cum, take one gross sample at each 200 cum. 	
	g) Aggregate crushing value		
	h) Flakiness Index Thickness Test		
3.	Bricks		IS 5454-1978
	a) Visual Check	<ul style="list-style-type: none"> Total 20 Nos. of Bricks to be selected from three trucks (i.e. 6 to 7 bricks from each Truck) 	
	b) Dimensioned Check		
	c) Water absorption	<ul style="list-style-type: none"> For each source Random 3 Nos. to be tested from 20 Nos. of bricks as selected in 6 (i) & 6(ii) 	
	d) Compressive strength		
4.	Cement		IS 3535 - 1986
	i. Fineness of cement	<ul style="list-style-type: none"> For each batch received at site 	
	ii. Standard consistency of cement		
	iii. Setting time		
	iv. Compressive strength		
	v. Soundness		
5.	Reinforcement Steel		IS 1786-1985
	Rolling margin	<ul style="list-style-type: none"> For bar dia. < 10mm – One sample from each 25 tonne or part thereof For bar dia. 10mm to 16mm – One sample from each 35 tonne or part thereof 	

		<ul style="list-style-type: none"> ○ For bar dia above 16mm – One sample from each 45 tone or part thereof ○ One sample consists of 3 Nos. of bars of at least 0.5m length 													
	Tensile Test Elongation Bend – Rebend test	<ul style="list-style-type: none"> • For each lot received at site 													
6.	Structural Steel														
	Rolling Margin	<ul style="list-style-type: none"> • One sample for each 20 MT or part thereof 													
	Tensile test Elongation Bend – Rebend test														
7.	Concrete		IS 456-2000												
	Slump Test Compressive strength	<ul style="list-style-type: none"> • For each concrete cube set • The cube samples shall be taken for each grade of concrete for following daily concrete quantity <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Qty. of concrete in Cum (Daily)</th> <th style="width: 50%;">Qty. of concrete in Cum (Daily) Number of Samples</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1-5</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="text-align: center;">6-15</td> <td style="text-align: center;">2</td> </tr> <tr> <td style="text-align: center;">16-30</td> <td style="text-align: center;">3</td> </tr> <tr> <td style="text-align: center;">31-50</td> <td style="text-align: center;">4</td> </tr> <tr> <td style="text-align: center;">51 and Above</td> <td style="text-align: center;">4 Plus one additional for each 50 cum. Of concrete</td> </tr> </tbody> </table>	Qty. of concrete in Cum (Daily)	Qty. of concrete in Cum (Daily) Number of Samples	1-5	1	6-15	2	16-30	3	31-50	4	51 and Above	4 Plus one additional for each 50 cum. Of concrete	
Qty. of concrete in Cum (Daily)	Qty. of concrete in Cum (Daily) Number of Samples														
1-5	1														
6-15	2														
16-30	3														
31-50	4														
51 and Above	4 Plus one additional for each 50 cum. Of concrete														
		<ul style="list-style-type: none"> • One sample consists of six nos of cubes. Three for 7 days and three for 28 days strength. However where 7 days strength is not required the sample size may be reduced to three nos of cubes for 28 days strength only. • Standard deviation to be taken every month • The frequency is to maintain for initial period, till consistent results are obtained. It may be reduced as per engineer in charge's discretion 													
8.	Calibration of test equipment	<ul style="list-style-type: none"> • As per frequency set in Laboratory Manual 													
9.	Inspection and test status	<ul style="list-style-type: none"> • Daily 													
10.	Control of nonconforming product	<ul style="list-style-type: none"> • On occurrence of Nonconformity 													

Asphalt flexible pavement/Asphalt carpeting-recarpeting/Polymeric/Cement concrete roads

Category of works

1. Construction of flexible pavement up to Metal grouting level.
2. Construction of flexible pavement (wearing coat).
3. Construction of rigid pavement.
4. Construction of Flexo rigid Polymeric Pavement (Wearing Coat as resurfacing)

Scope of work of "TPI" for above mentioned category of roads.

Category 1: Construction of flexible pavement up to metal grouting level including earth work and GSB I GSB - III WMM and WBM

- The "TPI" shall visit the quarry I material source of the successful contractor of the work and shall ascertain the acceptability of the material source in accordance with the MoRTH 2001 Specifications and the concerned tender conditions. Also the same shall be checked periodically to ascertain that the material supplied for the work is the same which has been sanctioned for the said work.
- The visit to the quarry I material source is minimum one for the work and shall be done for every change of the material source.
- "TPI" shall provide the certificate of the successful completion of the each layer mentioned below and the next layer shall be started only after the issuance of the said certificate.
- The frequency of all the necessary tests of the work shall be as per the "ANNEXURE"
- The sub grade level work inspection shall be in accordance with the following.
 - Line, level, camber, profile, gradient & setting out of the sub grade
 - Compaction tests as and when required in accordance with the tender conditions
 - Soil stabilizing tests for confirming the density, CBR, pulverization of stabilized soil and as specified in the tender condition.
- The Sub Base course and Base course level work shall be in accordance with the following
 - All the tests of material quality and gradation requirement as per the tender condition and in accordance with the MoRTH 2001 specification.
 - Periodical checks for the thickness of the layer and on the basis of ascertaining the quantity of material used in the said layer.
 - Field and Laboratory Density tests as and when required and in accordance with the tender condition and as per MoRTH 2001 Specifications.
 - Necessary tests for CBR of compacted layer, compacted thickness, line, level and camber of the finished layer.

- Bituminous binder course level
- All necessary tests mentioned in the tender conditions
- All necessary test for earth work from borrow pits and borrow area at OMC requirement at all layers. Including MDD test. as per IS / MORTH Requirement
 - The bituminous work shall be witnessed fully and shall be followed by the certificate of the TPI for the successful execution of the bituminous work.
 - Periodic checks for assuring the specified use of bitumen as mentioned in the tender condition
 - Necessary test for "rate of spread of key aggregate"

Category 2: Construction of Flexible pavement

- The "TPI" shall visit the quarry I material source of the successful contractor of the work and shall ascertain the acceptability of the material source in accordance with the MoRTH 2001 Specifications and the concerned tender conditions. Also the same shall be checked periodically to ascertain that the material supplied for the work is the same which has been sanctioned for the said work.
- The visit to the quarry I material source is minimum one for the work and shall be done for every change of the material source.
- The frequency of all the necessary tests of the work shall be as per the "ANNEXURE"
- The "TPI" shall witness the "Mix Design" and "Job Mix Formula" for the different bituminous layers of the work and shall periodically check for the same during the execution of the work.
- The "TPI" shall visit the "hot mix plant" of the successful contractor and shall check for the calibration of the plant in terms of the quantity and quality.
- The work of the said tender can be performed during "day" or "night" as per the circumstances and the "TPI" shall arrange accordingly to make it convenient to remain present during the necessary activity.
- The "TPI" shall check periodically or as and when required for the gradation and the bitumen consumption of the bituminous mix.
- The "TPI" shall check periodically for ascertaining the surface regularity and "compacted thickness" of layers incorporated in the said work.
- The "TPI" shall take all necessary actions to ascertain the carrying out of the work by the specified machineries of the said work.

Category 3: Construction of Rigid pavement (Cement Concrete road).

- The "TPI" shall follow the tender conditions for the entire work and if any ambiguity is raised during the work, the same shall be confirmed with MoRTH 2001 specifications and relevant IRC codes and guidelines.
- The "TPI" shall check the existing levels of the road where the "rigid Pavement" is to be done as supplied by the successful contractor and shall verify the same with the FRLs of the different layers.
- The "TPI" shall also check for the longitudinal and lateral profile of the pavement submitted by the successful contractor of the work and shall see that the same is appropriate for the said work.
- The "TPI" shall visit the quarry I material source of the successful contractor of the work and shall ascertain the acceptability of the material source in accordance with the MoRTH 2001 Specifications and the concerned tender conditions. Also the same shall be checked periodically to ascertain that the material supplied for the work is the same which has been sanctioned for the said work
- The visit to the quarry I material source is minimum one for the work and shall be done for every change of the material source
- The "TPI" shall visit the "RMC Plant" of the successful contractor and the same shall be ascertained and certified by the "TPI" that the same is in accordance with the tender conditions and requirements. The above shall comprise of the calibration of the plant in terms of quantity and quality of the mix.

- The "TPI" shall visit the "Testing Laboratory" of the successful contractor and shall calibrate each and every instrument necessary for routine testing procedures of the work as mentioned in the tender of the said work.
- The "TPI" shall witness the "Job mix formula" and "mix design" procedures for each type of mix like "granular sub base material", "Wet mix macadam", "Dry lean concrete", "Pavement quality concrete" and other required concrete mix and shall see for the entire work the same is maintained.
- The "TPI" shall witness the execution of the "TRIAL PATCH" of the work and shall submit the certificate to work further if found satisfactory.
- The work of the said tender can be performed during "day" or "night" as per the circumstances and the "TPI" shall arrange accordingly to make it convenient to remain present during the necessary activity.
- "TPI" shall provide the certificate of the successful completion of the each layer and the next layer shall be carried out only after the issuance of the said certificate.
- The frequency of all the necessary tests of the work shall be as per the "ANNEXURE"
- The "TPI" shall periodically check for the compacted thickness and the density of the different layers and shall perform the same until the satisfactory level is achieved.
- The "TPI" shall constantly check for the important parameters of the said work i.e. "Temperature of the concrete", "workability of concrete" and "timely and effective curing of the concrete" and shall ascertain the same for the entire work.
- The "TPI" shall periodically I at regular interval check for the
 - Quality of cement
 - Quantity of cement to be used
 - Performance of RMC plant as necessary for the work
 - Quality of admixtures and fibres to be used for the entire work
 - Quality and quantity of the reinforcement to be used for the entire work.
 - Quality and quantity of all other materials to be used in the entire work.
- The "TPI" shall ascertain and certify after the completion of the "finished road level" that the entire work has been carried out as per the tender conditions and is as per the "TPI"s satisfaction.
- The "TPI" shall also submit the
 - Results of strength of the concrete by the "core test" at a frequency as mentioned in the tender of the said work.
 - Results of surface regularity and texturing tests at a frequency as mentioned in the tender of the said work.
 - "Crack mapping chart" as per the tender conditions and relevant IRC codes.

Category 4: Construction of Bridges and culverts .

- The "TPI" shall check the Centering and line levels as per the details design and drawings at different stages. The centering shall be at plumb level and as per tolerance given in MoRT&H specification
- The "TPI" shall visit the quarry material source of the successful contractor of the work and shall ascertain the acceptability of the material source in accordance with the MoRTH section -1700 Specifications and the concerned tender conditions. Also the same shall be checked periodically to ascertain that the material supplied for the work is the same which has been sanctioned for the said work
- The visit to the quarry material source is minimum one for the work and shall be done for every change of the material source
- The "TPI" shall remain present in whole concreting work.
- The "TPI" shall check the staging and scaffolding before the measure concreting and staging shall be as per the Design.
- The "TPI" shall visit the "RMC Plant" of the successful contractor and the same shall be ascertained and certified by the "TPI" that the same is in accordance with the tender conditions and requirements. The above shall comprise of the calibration of the plant in terms of quantity and quality of the mix.
- The "TPI" shall visit the "Testing Laboratory" of the successful contractor and shall calibrate each and every instrument necessary for routine testing procedures of the work as mentioned in the tender of the said work.

- The "TPI" shall witness the "Design mix" and "mix design" procedures for each type of mix like "M150, M200 and M300 concrete " and other required concrete mix and shall see for the entire work the same is maintained.
- The "TPI" shall visit the plant site during the concreting and carried the test of coarse , fine aggregates and witness the all the tests
- The "TPI" shall check the frequency of testing and carry out the test as per the quality assurance plan

Category 5: Construction of Miscellaneous work .

- 1 Pre cast kerb works
- 2 Paver block works
- 3 Villages cc roads
- 4 R. C. C pre cast compound wall
- 5 Foot path work
- 6 Divider works
- 7 Fabrication works
- 8 Pre cast work

SCHEDULE FOR TESTING OF MATERIALS

For ensuring quality control and workmanship, various tests prescribed below for materials to be used for all items mentioned in Schedule-B shall be taken at periodical intervals as stipulated below.

It. No.	Brief Description of Materials to be tested	Qty. of Materials	Prescription of test which shall be carried out	Frequency @ which test shall be carried out
1.	Coarse aggregate	To be evaluated from relevant item.	<ul style="list-style-type: none"> - Gradation Test - Impact value - Flakiness Index - Soundness test - Stripping value - Water absorption 	1 to 100 Cmt - 1 Test 100 to 500 Cmt - 3 Test 500 to 1500 Cmt - 5 Test 1500 to 5000 Cmt - 7 Test
2.	Grit	To be evaluated from relevant item.	<ul style="list-style-type: none"> - Stripping Value 	One test per work for a single source
3.	Tack coat	To be evaluated from relevant item.	<ul style="list-style-type: none"> - Binder temperature for application. - Rate of spread of binder. 	Irregular at close intervals Two tests per day.
4.	Binder course & Wearing coat		<ul style="list-style-type: none"> - Grading - Temperature of binder in boiler, aggregates in the dryer and mix at the time of laying and rolling - Rate of Spread of mix materials 	One Test on individual constituents and mixed aggregates from the dryer for each 100 tonnes of mix subject to minimum of Two tests per plant per day. One Test for each 100 tons of mix subjects to mini. of Two per day plant. Regular control through checks on layer thickness.

PROPERTIES OF GROUT**TABLE -1**

S. N.	<i>Property Parameter</i>	Measurement method	Value	To be tested in
1.	Density Kg/m ³	IS 1528 - XII	1900 - 2000	Any Govt. Semi Govt. Govt. approved laboratory
2.	Compressive strength MPa at 3 days,	IS 516	8 - 10	„
3.	Compressive strength MPa at 28 days,	IS 516	35	

PROPERTIES OF COMPOSITE CORE OF COMPLETED PRODUCT TABLE - 2				
Sr. No.	Property Parameter/Reference	Value	Tested in	Frequency of Test
1.	Compressive strength at 28 days, MPa IS 516-1959	4	Any Govt. I Semi Govt. I Govt. approved laboratory	For every 8000 sq.mt. or part thereof resurfacing work.
2.	Wear Resistance , mgISq.mt. IS 1237	8 ± 1		
3.	Water Permeability Absorption Test. IS: 3085-1965	<2%		
4.	Rapid Chloride Penetration Test, Coulomb ASTM: C1202-97	<1000		
5.	Sunlight	No effect	filed observation	
6.	Fuel I Petroleum Spill	No Effect	field observation	

Charges for required mix design and charges for testing during contract period shall be born by contractor of project.

SCHEDULE OF TESTS TO BE CARRIED OUT FOR METAL GROUTING WORK

It. No. as per scheudle-B	Brief Description of materials to be tested	Qty. of material as per Schedule-B	Prescribed tests to be carried out	Frequency at which test shall be carried out (based on the Qty. of material to be used).
3,4 & 5	-Lime fly ash stabilized soil sub grade.		Density of compacted layer. (MDD to be attained 98%) Degree of pulverization.	1 Test per 500 sqmt. Area. Periodically OR as & when required.
			CBR Value	15% Minimum
It. No.3	-Fly ash as per IS:3812 physical Test			1 Test per work,
	-Fly ash as per IS:3812 chemical Test			1 Test required for work amounting more than Rs.10.0 lacs. & for work amounting less than Rs.10.0 lacs, contractor shall have to obtain approval of Engi. in charge for source of fly ash.
It. No.4	Lime as per IS:1514			Min. 1 Test per work Subject to min. of 1 Test per 5 Tonnes.
6 (i) & (ii)	Quarry Spoil	CM	- Gradation test	One test per 200 M ³ Qty.
	(Layer IIA as per drg.)		- Density of compacted layer (MDD to be attained 95%) (As per IS:2720 Part(XXVIII) 1966.	1 Test per 500 sqmt. area.
	(Layer IIA as per drg.)		Compacted layer (MDD to be attained 98%)	1 Test per 500 sqmt. area.
			CBR value (As per IS:2720 Part(XVI) 1965.	30% Minimum
9,13 (i) & (ii)	M.C. Metal CM	- Gradation test - Impact value - Flakiness - Water absorption & specific gravity	1 to 100 cm 1 Test 100 to 500 cm 3 Test 500 to 1500cm 5 Test 1500 to 5000 cm 7 Test
11 (i) & (ii)	Grit	CM	- Gradation test & specific gravity	One test per individual road site.

SCHEDULE FOR TESTING OF MATERIALS

Flexible Pavement (Asphalt WORK)

For ensuring quality control and workmanship, Various tests prescribed below for materials to be used for all items mentioned in Schedule-B shall be taken at periodical intervals as stipulated below.

It. No.	Brief Description of Material to be	Qty.of Materials	Prescription of test which shall be carried out.	Frequency @ which test shall be carried out
1	Coarse aggregate	To be evaluated from relevant item.	- Gradation Test - Impact value - Flakiness Index - Soundness test. - Star tipping value - Value - Water absorption.	1 To 100 cmt-1 Test 100 To 500 cmt-3 Test 500 To 1500 cmt-5 Test 1500 To 5000 cmt-7 Test
2	Grit	To be evaluated for relevant item.	- Stripping value	One test per work for a single source
3	Asphalt	To be evaluated for relevant item.	- Penetration test - Ductility test - SP.GR. test - Softening point	Tanker Test 1 1 2 to 15 2 15 to 50 3 above 50 one/tanker
4	Tack Coat	To be evaluated for relevant item.	- Binder temperature for application. - Rate of spread of binder.	Irregular at close intervals. Two tests per day.
5	Binder course & Wearing coat		- Grading	One test on individual constituents and mixed aggregates from the dryer for each 100 tonnes of mix subject to minimum of two tests per plant per day.
			- Temperature of binder in aggregates in the dryer and mix at the time of laying and rolling.	One test for each 100 tons of mix subjects to mini. of two per day plant.
			- Rate of spread of mix materials.	Regular control through checks on layer thickness.

Charges for required mix design and charges for testing during contract period shall be born by contractor.

EARTH WORK IN EMBANKMENT & SUBGRADE : TABLE - A

Name of Test	Purpose of Test	Time of Tests	Field Test of Lab Test
1) Grain size analysis (Gradation)	Grain size analysis also know as mechanical analysis is the determination of the percent of individual grain size present i.e. Gravel Sand and silt gives an exact idea whether the soil is well graded or poorly graded	Prior to the start of construction of embankment for checking the suitability of soil to be used in fill and during construction as per specified frequency.	Lab
2) Plasticity Test	The liquid & plastic limits of soils form the basis for the soil classification system for cohesive soils based on plasticity test give information consuming the cohesion properties of soil and the amount of capillary water which it can hold.	Prior to the start of construction of embankment for checking the suitability of soil to be used in fill and during construction as per specified frequency.	Lab
3) Compaction Test i.e. Maximum dry density, moisture content determination test.	To determine the proper amount of mixing water to be used when compacting the soil in the field and the resulting degree of denseness which can be expected from compaction at optimum moisture contest.	Prior to the start of construction of embankment for checking the suitability of soil to be used in fill and during construction as per specified frequency.	Lab
4) Field Dry density test by sand replacement method	To determine the achievement of percentage of compaction at field with respect to the maximum compaction achieved at laboratory and co-relate the results for the acceptance criterion as specification	After compaction of each layer as per specified frequency	Field
5) California bearing ratio test (C.B.R)	The CBR is a measure of resistance of soil sample to penetration of standard plunger under controlled density and moisture conditions. This test is empirical & Cant be related accurately with any fundamental property of material. Penetration at 2.5 mm & 5.0 mm with standard load 1370 kg. and 2055 kg. respectively shall be compared to the result found for the soil sample in percentage.	Nominally prior to the design of the embankment and sub grade CBR Value is required to decide the approval of the soil.	Lab
6) Free swell Index test	Free swell is the increase in volume of soil without any e3xternal of soil without any external constraints on submergence in water. The possibility of damage to structures due to swelling of expansive clays need to be identified by an investigation of those soils likely to possess undesirable expansion characteristics.	Prior to the start of any soil test of expansion is more than acceptance criteria, no other tests are required but to reject the soil.	Lab

TESTS FOR AGGREGATES TO BE USED FOR ROAD WORKS: TABLE - A

Name of Test	Purpose of Test	Time of Tests	Field Test of Lab Test
1) Aggregate impact value (AIV)	To determine whether the aggregate is able to resist the crushing impact under the roller during road construction	Prior the work of GSB, WMM this value is required for the approval of the stone quarry	Lab
2) Abrasion Test	To, determine the resistance of the aggregate subjected to wearing action at top due to moments of traffic	Prior to the approval of stone quarry.	Lab
3) Soundness Test	To study the resistance of aggregate to weathering action to weathering action .Aggregate sample reacts with sodium soleplate Degree of reaction determines how much ability the aggregate have to resists weather action (variation is weight should be minimum)	Prior to the approval so stone quarry	Lab
4) Specific & Gravity & water Absorption	Sp. Gravity of an aggregate is considered to be a measure of strength or quality of materials Water absorption gives an idea of strength of rock More sp. Gravity and less water absorption always gives best quality	Prior to the approval of stone quarry	Lab.
5) Flaking & Elongation Lab	The flakiness index of aggregate is the percentage by weight of particle whose least dimension i.e. thickness is less than 3/5 the or (0.6) of their mean dimensions & elongation index is the (%) by weight of partied whose greatest dimension is > 1 4/5 the or (1:8) times of their mean dimensions	Prior to the approval of stone quarry	Lab
6) Cruising value test or 10 % fine	The test is to measures the resistance of the aggregate to the crushing low aggregate crushing value indicates strong aggregates. The aggregates to be used for the surface course are required to be strong to withstand the high stresses due to wheel	Prior to the start of surface course	Lab (being carried out Side I Laboratory

TESTS FOR AGGREGATES TO BE USED FOR ROAD WORKS TABLE - B

Name of Test	Standards (Acceptance Criteria)	Frequency	Relevant specification
1) Aggregate impact value (AIV)	30 % maximum	For source approval & periodical	
2) Abrasion Test	50 % maximum	For source approval & periodical	
3) Soundness Test	Maximum 15 % with sodium sulphate	For source approval & periodical	
4) Specific Gravity & water Absorption	Specific gravity minimum 2.6 & water absorption maximum 2 to 3 % (maximum)	For source approval & periodical	
5) Flaking & Elongation Lab	Flakiness - 15 % maximum Elongation -15 % maximum Combined - 25 % to 30 % maximum	For source approval & periodical	
6) Crushing value test or 10 % fine value	50 KN (Minimum)	For source approval & periodical	

TESTS FOR GSB MATERIAL - TABLE - B: In addition to tests specified for Aggregates

Name of Test	Standards (Acceptance Criteria)	Frequency	Relevant specification
1) Liquid limits for material fines than 425 micron	25 % Maximum	1 test per 200 Cum	MORT & H Cl. No. 401.2.2 Table -900-3
2) Plasticity Index for material fine than 425 micron	6 % maximum	1 test per 200 Cum	MORT & H Cl. No. 401.2.2 Table -900 -3
3) Water absorption	2 % maximum	For source approval	MORT & HCL.NO. 401.2.2
4 Gradation	As per the specifications laid down for close graded and coarse graded USB materials in MORT & H	1 test per 200 cum of each	As per MORT & H Table
4) Density Test of compacted layer	98 % of Maximum Dry density	1 test per 500 Sqm of compacted layer	MORT & H Table -900-3
5) Uniform air voids content	5 %	For designing the mix	MORT & H CL. No.401.2.2

TESTS FOR PAVEMENT QUALITY CONCRETE:TABLE - A

Name of Test	Purpose of Test	Time of Tests	Field Test of Lab Test
1) Slump test	To check the workability of concrete	Before paving	field
2) Compressive strength (Cube crushing strength)	To check whether concrete is satisfying strength requirements	At the age of 28 days of paving	Lab
3) Flexural strength	To check whether concrete is satisfying strength requirements.	At the age of 28 days of paving	Lab
4) Surface Regularity	To determine the undulations on road surface by straight edge test method.	After concrete pavement is set and hardened	Field
5) Surface Texture	To determine the depth of texture by sand patch method	Preferably between 24 hrs. and 7 days after the construction	Field
6) Core test on hardened concrete	Where the strength requirements at 2 & 3 above are not met with or quality or its compaction is suspect	On hardened concrete	Lab
7) Gradation	To confirm the aggregates are well graded or poorly graded	Prior to approved of Aggregates	Lab

TESTS FOR PAVEMENT QUALITY CONCRETE:TABLE - B

Name of Test	Standards (Acceptance Criteria)	Frequency	Relevant specification
1) Slump test	30 ± 15	One test per truck / dumper load at plant & at paving site.	IS :1199
2) Compressive strength	As per grade of concrete	2 cubes per 150 cum (1 for 7 days & other for 28 days strength)	IS: 516
3) Flexural strength	As per grade of concrete	2 cubes per 150 cum (1 for 7 days & other for 28 days strength)	IS: 516
4) Surface Regularity	As per the specifications laid down in MORT & H	As per requirement	MORT & H Table No. 900.2
5) Surface Texture	1 ± 0.25 mm	5 individual measurements taken at least 2 m apart along a diagonal line across a lane width between points, 50 m apart along the pavement	MORT & H Table No. 600-2.2 Cl.No. 602.13.2
6) Core test	As per concrete MIX	At 2 cores per 1500 cum of concrete or as required only in case of doubt	IS : 516
7) Gradation	As per limit specified	1 test for every days work	Material IS 383 & testing IS 2386 -1963 (Part I)

Quality Assurance Plans

Depending upon specifications of contract documents, TPI shall collect details of manufacturing process, applicable specifications, applicable drawing and their specified limits of parameters to be inspected in support of quality of manufacture as per the standards I specifications I requirements approved by the client. TPI shall under take scrutiny and vetting of manufacturer's item-wise Quality Assurance Plans for their adequacy and completeness and the then decide upon the involvement at different stages of manufacture

Ensuring usage of correct materials

1. Verification of test certificates and correlation with the material prior to induction
2. Conducting destructive and non-destructive tests on material being inducted, as per drawing I QAP
3. Metallographic (MacroIMicro) examination as considered appropriate
4. Chemical analysis, Metrological and physical testing I checks

Quality Assurance / Quality Surveillance / Inspection at all stages of manufacture and assembly

1. Verification of manufacturer's quality control records I log sheets to ensure compliance as per agreed QAP I Standard
2. Checking of soundness of casting & forging as per laid down standards I specifications.
3. Quality Surveillance during stages of manufacture I assembly, etc at manufacturers I sub-vendors premises as per QAP requirement
4. Dimensional checks on fabricated products
5. Checking of imported dimensions, alignments, clearances, surface contact, dynamic balancing, leakages, torque etc. at various stages of manufacture and assembly as appropriate as per QAP requirement.

Test before dispatch and documentation including pre-shipment inspection

1. Performance I operation I functional tests before dispatch of the products as appropriate
2. Dimensional check, alignment and clearance check as applicable
3. Test on stores as per purchase order specification (IS, BS, API, ASTM etc.) on test bed I rig
4. Deposition of non-conformities in co-ordination with client and manufacture
5. Re-testing of adequate preservation of components before shipment
6. Documentation and issue of dispatch clearance 7 Inspection certification
7. All documentation 7 procedures as per requirements for pre-shipment inspection

1		Visit to site of Construction
	1	Obtain the day's I week's activity program from the contractor's representative
	2	Confirm with the field supervisor of executing agency, of day's program
	3	Carry all necessary check sheets I QAP Specifications I drawing I measuring tape may required at site
2		Visual examination and review of input material's test report
	1	Sand - fine I very fine I Coarse
	2	Bricks - well burnt I over burnt I shape
	3	Aggregates - size I flakiness
	4	Steel - approved brand
	5	Shuttering plates - good quality

	6	Check the above materials from approved vendor list
	7	Check the quality of pipes and fittings - ensure that it is pre-inspected, no damage during transportation
3		Review of test reports I witness of the testing at site
	1	Compare the values of results with reference to acceptable limits as per relevant IS I specifications
	2	After satisfying for acceptable I not acceptable - do the endorsement on test report (original) as " reviewed and found acceptable I not acceptable"
4		Inspection of construction activity in stages
	1	Check the layout of the structure as per approved drawing for its dimensions and levels, reference, bench marks, reference pillar.
	2	Check the PCC at raft level stage for thickness and grade
	3	Check the footing : dimensional check, reinforcement check, spacing, overlaps, curtailments, binding of bars, stirrups spacing -type-dia, cover blocks, end cover
	4	Check the formwork I shuttering as per required dimensions, in line and level with firm support, no gap in between the plates, shuttering oil
	5	Check for steel reinforcement: Use of approved brand and grade, Placing of reinforcement in correct position, check dia, spacing, overlaps, curtailment
	6	Check I witness pour of concrete at every lift for required grade of concrete, required size of ingredients like cement, sand, aggregates, steel of approved resources, water cement ration. Field test like silt content, slump measurement, cube casting
	7	Check at every lift of concrete or 1 meter height for parameters indicated under 3 & 4
	8	Check at brickwork, plaster, painting as per standard engineering practice and observations with respect to specific parameter shall be recorded in a quality observation report. Any deviation noticed shall be brought to notice of field In-charge of the client immediately on phone followed by the submission of report on next day
5		Reporting of Quality observations to Client
	1	The quality observation report prepared shall be submitted to field In charge mostly DEE of the client with in 24 hrs. Any deviation shall be intimated within 6 hrs on phone and same shall be incorporated in quality observation report
	2	The field engineer must communicate with client's engineer every day
	3	The field Inspecting Engineer must intimate to his controlling manager on phone I in person of all deviations I visit of Client's officer I any event which he feels may be relevant.

	4	The summary of observation shall be made and submitted to the client's Director (Projects) once in a fifteen days
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10.0 Team composition and staff qualifications. For Projects up to 10 Crores.

- 10.1 An experienced & qualified senior Highway engineer with min. 15 years of experience in the management of roads procurement quality control, out of which at least 7 years in relevant of this work - quality control experience having minimum qualification of B.E. Civil, will be the team leader.
- 10.2 1 No. per work - Quality assurance engineers with 5 years experience having minimum qualification of B.E. Civil.
- 10.3 1 No. per work - Laboratory in charge, having experience of 3 years in field testing. They should have minimum B.E.Civil/Diploma Civil Engineering from polytechnics.
- 10.4 1 No. per work - Laboratory assistant with minimum experience 3 years in field of testing They should have minimum diploma Civil Engineering from Poly technician.

Note:-

- 1) For Projects having more than 10 Crores and multiple of there of each 10 crores section one additional team as above shall be required and shall be arrange by TPI Agency. For the day to day site inspection
- 2) Consultant will arrange a system to cross check / verify the presence manpower to be deployed for site work, as instructed by Engineer in Charge.

SIGNATURE OF THE TENDERER

Address
Date

Director (Projects)
RUDA.RAJKOT