

RAJKOT URBAN DEVELOPMENT AUTHORITY



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<u>री-</u> टेन्डर नोटीस

રાજકોટ શહેરી વિકાસ સત્તામંડળ દ્વારા માન્ય ટેસ્ટીંગ લેબોરેટરી/એજન્સીઓ પાસેથી નીચે મુજબના કામ માટે એફલાઇન ભાવ-પત્રક મંગાવવામાં આવે છે.

3SI/૧૯૫/૨ ૧	એમ્પેનલમેન્ટ ફોર ટેસ્ટીંગ લેબોરેટરી/એજન્સીસ ફોર સેમ્પલ કલેક્શન એન્ડ ટેસ્ટીંગ ફોર વેરીયસ ઇન્ફ્રાસ્ટ્રક્ચર પ્રોજેક્ટ્સ ઓફ રૂડા	a) રૂ. ૫૦,૦૦૦/- b) રૂ. ૧,૩૨૮/- (૧૮.૦% GST સાથે) d) તા.૨૭.૧૧.૨૦૨૦
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ટેન્ડરની વધુ જાણકારી માટે રૂડા કચેરીની પી.એમ.યુ શાખા તથા રૂડાની વેબ સાઇટ www.rajkotuda.com પર ઉપલબ્ધ થશે.

-Sd-મુખ્ય કારોબારી અધિકારી રૂડા-રાજકોટ

RAJKOT URBAN DEVELOPMENT AUTHORITY

TENDER No RUDA/195/2020-21



Empanelment for Testing laboratories/Agencies for Samples Collection and Testing for various infrastructures projects of RUDA

Last date for Quo	tation is as under
1. Downloading of documents from RUDA web site	5.11.2020
2. Pre bid meeting	10-11-20 up to 18.00 hours
3. Last Date of Physical submission of Quotation	27-11-20 up to 11.00 hours
3.Opening of Quotation	27-11-20 16.00 hours

Director(projects)

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

Ph: 0281-2476847, Email: info@rajkotuda.com

Rajkot Urban Development Authority (RUDA) has started number of Infrastructure Work in RUDA area like PMAY Awas yojana, Construction of Ring Road, Bridges, Various Bituminous & Metalling Road, Water Supply Project, Underground Drainage project, Affordable housing project and various civil work total amounting Rupees more than 300 crores.

Authority invites to appoint consultant for testing of material including sample collection as well as field testing with following condition.

- 1. site visit for sample collection, consultant has to submit sample collection sheet data along with invoice.
- 2. In case of deviation/failing of testing /quality of materials or unacceptable quality work, Testing agency shall have to suggest corrective action also.
- 3. Consultant shall have valid registration as Approved List of Laboratory from state R&B and NABL (attach Certificate of R & B and NABL)
- 4. Consultants should have a own or Laboratory their branch within RMC & RUDA area.
- 5. Consultants should have produced the List of Laboratory equipments with tax invoice for testing as well as staff details with c.v. engaged for lab work.
- 6. Consultants should have produce NABL Registration.
- 7. Consultants should have produced Govt. or semi Govt. Work order for Testing and type of tests carried out.
- 8. All Rates should be quoted inclusive of all kind of tax including GST.
- 9. RUDA will Not Provide vehicle facility for site visit & sample collection. Agency may have to arrange own vehicle.
- Tender with incomplete document will not be accepted, and without such document bid will be considered as NON-RESPONSIVE.
- 11. Consultants should submit in hard copy of documents & Rate of Testing in Physical form up to 27/11/2020 in seal cover to chief executive officer Rajkot Urban Development Authority, Chimanbhai Patel Vikas Bhavan, Jamnagar Road, Rajkot by RPAD or speed post only.
- 12. Conditional tender with rate of testing not accepted and rejected our right.

- 13. જે ટેસ્ટ કરવા માટે NABL અને રાજ્યનાં માર્ગ અને મકાન વિભાગની મંજુરી હોય તે ઉપરાંત તમામ ટેસ્ટ માટે એજન્સી/લેબોરેટરીએ ભાવો ભરવાનાં રહેશે.
- 14. એજન્સી/લેબરેટરી દ્વારા રજુ થયેલ સેમ્પલ કલેકશન અને ટેસ્ટીંગના ભાવો અન્વયે સત્તામંડળ દ્વારા આપવામાં આવેલ ટેસ્ટીંગ લીસ્ટ મુજબ જે એજન્સી દ્વારા ભરેલ ભાવોમાં વધારે આઇટમમાં નીયા ભાવો ભરેલ હશે તેમને L1 ગણવામાં આવશે.
- 15. તમામ લેબરેટરીઓ/એજન્સીઓ દ્વારા જુદા-જુદા ટેસ્ટીંગ માટે ભરવામાં આવેલ નીયા ભાવો સત્તામંડળ દ્વારા મંજુર કરી ભાગ લેનાર એજન્સીઓની સહમિતનુંસાર તેવી એજન્સીઓને એમ્પેનલમેન્ટ કરવા માટેની તમામ સતા રાજકોટ શહેરી વિકાસ સત્તામંડળની રહેશે.અને જે અંગેનો આખરી નિર્ણય મુખ્ય કારોબારી અધિકારીશ્રીનો રહેશે,જે તમામ એજન્સીઓને બંધનકર્તા રહેશે.
- 16. કામ સોપવામા આવેલ લેબોરેટરી /એજન્સીએ સ્થળ પર સેમ્પલ કલેકશન માટે મોકલનાર પ્રતિનીધી ઓછામાં ઓછો ડીપ્લોમાની ડીગ્રી ધરાવતો હોવો જોઇએ અને સેમ્પલ કલેકશન બાબતનો પાંચ વર્ષનો અનુભવ હોવો જોઇએ. એજન્સી દ્વારા નિયત કરેલ પ્રતીનીધીઓના C.V. અત્રેની કચેરીમાં રજુ કરવાના રહેશે.
- 17. આ ટેન્ડર ફેઠળ એમ્પેનેલમેન્ટ્ની સમય મર્યાદા એગ્રીમેન્ટ થયેથી ૨(બે) વર્ષની રફેશે.સત્તામંડળ અને એજન્સીની સહમતિથી જરૂર જણાયે વધુ ૧(એક) વર્ષ ટેન્ડરમાં કામ કરવા માટે સમય મર્યાદા વધારવાની સત્તા માન. મુખ્ય કારોબારી અધિકારીશ્રીની રફેશે.
- 18. ઇનીસીયલ સીક્યુરીટી ડીપોઝીટ પેટે કામ કરનાર લેબોરેટરી/એજન્સીને રકમ રૂ.૧,૦૦,૦૦૦.૦૦ રજુ કરવાની રહેશે. સીક્યુરીટી ડીપોઝીટની રકમ લેબોરેટરી/એજન્સીને કામનો કરાર પુર્ણ થયાથી ૬ (છ) માસ બાદ પરત કરવામાં આવશે.
- 19. ભાગ લેનાર એજન્સીઓ/લેબોરેટરીઓ દ્વારા ફિઝીકલ બીડ ડોક્યુમેન્ટ અથવા ટેન્ડર સીલબંધ કવરમાં જમા કરાવતી સમયે સત્તામંડળને ટેન્ડર સાથે અર્નેસ્ટ મની ડીપોઝીટ તરીકે રકમ રૂ.૫૦,૦૦૦/- ની FDR અને ટેન્ડર ફી રકમ રૂ.૧૩૨૮/(૧૮.૦% GST સાથે)- નો DD સીડ્યુલ/રાષ્ટ્રીયકૃત બેન્ક દ્વારા ઇસ્યુ કરેલ રાજકોટ શહેરી વિકાસ સત્તામંડળ-રાજકોટના નામે આપવાના રહેશે. જમા કરાવેલ ટેન્ડર ફી નોન રીફન્ડેબલ રહેશે. જ્યારે અર્નેસ્ટ મની ડીપોઝીટ પેટેની રકમ રૂ.૫૦,૦૦૦/ કરાર થયા બાદ પરત કરવામા આવશે.

AGREEMENT

THIS AGREEMENT made this day of by and between RAJKOT Urban Development Authority, shri Chimanbhai Patel Vikas Bhavan, Jamnagar Road, Rajkot. (Here in after called "the Employer") of the one part and Agency M/s. (Here in after called "the Testing Agency") of the other part. WITNHESSETH:

WHEREAS, the Employer is desirous that Material testing of Road projects and housing projects works to be done as per tender scope of works at the rate mentioned.

Now this agreement witnessed as follows:

- 1. In this agreement words and expressions shall have the same meaning as are respectively assigned to them in the scope of work hereinafter referred to.
- 2. The following documents shall be deemed to from and be read and construed as part of this agreement, viz.
 - a) The Employer's requirements / correspondence
 - b) The contract agreements
 - c) The letter of acceptance
 - d) Amendment and addenda, if any.
 - e) The Scope of Works
- 3. In consideration of the payment to be made by the employer to the Testing Agency as hereinafter mentioned, the Testing Agency hereby covenants with the employer to execute the works in conformity in all respects with the provisions of the scope of work.
- 4. The employer hereby covenants to pay the Testing Agency in consideration of the execution of the scope of works therein the rate finalized or such other sum as may become payable under the provisions of the scope of work at the times and in the manner prescribed by the agreement. In WITHNESS WHEREOF, the parties hereto have cased this Agreement to be executed on the day and year first above written.

Authorized Signature of Testing Agency	Authorized Signature of Employer
SEAL:	SEAL:
Name:	Name:
Signature:	Signature:

SCOPE OF WORK

SCOPE OF WORK FOR TESSTING WORK OF THE ALL RUDA WORKS.

- 1. For all kinds of the civil project works of RUDA, at the time of issue of the work order to contractor, all the concern DEE will compulsorily send final tender copy and relative drawing, specifications set to HOD of Material Testing Dept./ Testing Agency.
- 2. As per agreement between RUDA and Testing agency, the Quality Assurance team of the Material Testing Dept. of the testing agency shall collects and test all kinds of raw and finish material products of the CIVIL engineering work as per guideline of Bureau of Indian Standards / ASTM /British Code and relative tender specification.
- Nos. of frequency sample collection and testing shall be as per guide line of the BIS.
 (Depending in quantity of work) and ASTM
- 4. The authorized person from Testing agency for sample collection and site inspection shall be a degree holder with 1 year of experience or diploma holder with 5 years of in the material testing sector.
- 5. For all kinds of the Civil Eng. Project works of the RUDA, it is mandatory for all concern AE/AAE to send SMS on daily basis of work progress to,
 - a. HOD-Material Testing agency
 - b. Concern-RUDA DEE,

Before 24 hours, execution of any works of RUDA for random sample should collected for testing purpose by Testing Agency. (In case of bituminous mix work of ready Mix Concrete the details of each dispatched truck from plant must send SMS to Testing Agency, while dispatching trunk from plant and weigh bridge)

In the SMS AE/AAE shall be mention clearly – Site location, execution date, time, type of material, weight of material and detail about execution of work etc., In all works, if the concerned AE/AAE fails to send SMS to Testing Agency, he will be fully responsible for such negligence.

- 6. At the time of execution of work, Testing Agency shall visit site and to the collect samples randomly. The team shall perform following duties while visit the site.
 - a. Sample collection method should be follow as per guide line of the BIS/ASTM.
 - b. All Samples should be collected in 2 sets. One set for routine testing and another set for 2nd test in sample failure condition.
 - c. TESTING AGENCY shall collect sample randomly from current mixing materials (especially in cement concrete / Bitumen mix). TESTING AGENCY will never collect any finish product sample which is prepared after reaching the site.
 - d. Sample shall be collect in presence of the RUDA(WA/AAE/AE/DEE/PMC/TPI) and agency representative.
 - e. Sample collection note with site inspection check list shall be sign by the authorized engineer of testing agency, RUDA WA/AAE/AE/DEE/PMC/PMC/TPI and agency representative.
 - f. In addition that sample note collections date sheet with check list to varify site execution workmanship/quality of works by every means. (That sample collection date sheet or

- note with site inspection check list for R.C.C work / bitumen mix road work / WBM road work / water works / drainage works will be preparing by Testing Agency team before starting of work and shall take approval of the RUDA chairman)
- g. Every sample of raw material of all kinds like cement, steel, Aggregate, Sand, bricks AAC block, soil, water etc., shall be collected as per guidelines of BIS/ASTM with date sheets.
- h. At the time of site visit if any major variations in quality of material or in workmanship found, Testing Agency team shall immediately send SMS to the RUDA official direct.
- i. Specifically in cement concrete cube sample Testing Agency team shall compulsorily mark sample details by engraving identifications mark writing on cementing surface of the sample and take photograph of the same. That photograph of hand written cube should match with real mark on cube at the time of the testing. To prevent malpractice of the changing cubes samples during curing time at site.
- j. All necessary sample collection apparatus / instrument etc. all tools & tackles including water should be arranged by Testing Agency.
- k. For work executions on holidays, Testing Agency team should compulsorily remain present for sample collection.
- 7. Very important aspect for quality assurance & control of on-going project is to test sample as earlier as possible, to ensure quality in remaining project work. Considering that TESTING AGENCY team must inform concerned RUDA DEE/PMC/TPI about earliest testing date to perform witness test. At per-decided date and time if RUDA concern person is not present at Testing Agency Lab., in that situation Testing Agency team shall perform test of 1st set of sample.
- 8. In case of testing results,
 - a. All acceptable result shall be send to director of the RUDA in sealed cover with collection note copy which showing site inspection note with acceptance criteria.
 - b. All result within lower tolerance limit of failure must be compulsorily send to CEO of the RUDA in sealed cover with covering letter showing total numbers of samples taken for the particular work among them how many have failed? And how many have passed within lower tolerance limit and opinion / reasoning of the failure. Also mentioning about further action of improvement. The sample must also be attached for further reference.
 - c. The rates educes / rejection of material policy should be compulsorily implemented in case of the failure / passed sample within lower tolerance limit test result considering IS provision.
- 9. For each civil work RUDA, concerned DEE/PMC and director of RUDA will be fully responsible to manage continuous quality control on project work by agency and, quality assurance of the material testing by Testing Agency team.
- 10. For sample testing payment purpose, bill shall be sent on monthly work basis to director/Executive Engineer of RUDA.

Kindly send your proposal in following format on/before Dt. 27-11-20 upto 18.00 hours Rate for sample collection

Sr.no.	Description	Rate (in Rs.)Per One No. of sample	Rate (in words) Per One No. of sample
Α	Site visit for collection of sample as per BIS		
	& inspection report (Up to 3 No. sample		
	collection per Day per site		
В	Site visit for collection of sample as per BIS		
	& inspection report (up to 5 No.		
	sample collection per Day per site		
С	Site visit for collection of sample as per BIS		
	& inspection report (up to 10 No.		
	sample collection per Day per site		
D	Site visit for collection of sample as per BIS		
	& inspection report (More than 10 No.		
	sample collection per Day par site.		

Rate for Test As per BIS/ASTM/BC

Sr. No.	Name of Material	Name of Test	Unit	Rate (in Rs.)	Rate (in words)
1	SOIL	I.S.CLASSIFICATION	NO		
		OMC & MDD	NO		
		BOX SHEAR	NO		
		LIQUID LIMIT &	NO		
		PLASTIC LIMIT			
		GRADATION	NO		
		CBR	NO		
		PERMREABILITY	NO		
		CONSOLIDATION	NO		
		UCS	NO		
		FREE SWELL INDEX	NO		
		SPECIFIC GRAVITY	NO		
		SHRINKAGE LIMIT	NO		
		HYDROMETER	NO		
		ANALYSIS			
		RELATIVE DENSITY	NO		
		FIELD CBR	NO		
		FIEDL DENSITY & MOISTURE	NO		
		Deleterious Constituents of soil	NO		
		PLATE LOAD	NO		

2	SOIL FOR SBC	DISTRUB SAMPLE		
		Carrying out soil	PER BORE	
		investigation –	HOLE	
		including drilling of		
		100mm diameter		
		Borehole in Rock/soil		
		up to the maximum		
		depth of 10 m below		
		ground level or up to		
		hard stratum with N-		
		value 50 whichever		
		encountered earlier,		
		conducting standard		
		penetration test		
		where ever necessary		
		/collection of		
		disturbed/undisturbed		
		sample, and necessary		
		laboratory testing,		
		grain size analysis, LL,		
		PL etc required for		
		evaluation of safe		
		allowable Bearing		
		Capacity among the		
		scope of the Work.		
	FINE ACCRECATE	BULK DENSITY	No	
3	FINE AGGREGATE	SOUNDNESS	No.	
		SILT CONTENT	No.	
			No.	
		SPECIFIC GRAVITY & WATER ABSORPTION	No.	
		FINESS MODULUS	No.	
		FINESS MIODOLOS	NO.	
4	COARSE AGGREGATE	GRADETION	No.	
'	SOME MODINE OF THE	IMPECT	No.	
		SOUNDNESS	No.	
		LOSS ANGELS	No.	
		ABRASION		
		CRUSHING VALUE	No.	
		SPECIFIC GRAVITY &	No.	
		WATER ABSORPTION		
		FLAKINESS INDEX	No.	
		ELONGATION INDEX	No.	
		BULK DENSITY	No.	
		Alkali reactivity	No.	
		Silt Content	No.	

5	BRICKS	COMRESSIVE STENGTH (5NO.OF BRICK) WATER ABSORPTION(5NO.OF BRICK)	No.
		EFFLORESCENCE (5NO.OF BRICK)	No.
		DIMENSION & TOLERANCE (20NO.OF BRICK)	No.
6	BUILDING STONE	COMPRESSIVE STRENGTH	No.
7	CEMENT	CONSISTANCY TEST	No.
		INITIAL & FINAL SETTING TIME	No.
		COMPRESSIVE STENGTH	No.
		FINENESS BY SIEVING	No.
		FINENESS BY BLAINS	No.
		COMP. STR. OF CEMENT MORTAR CUBE (FOR 3 NOS)	No.
		COMP. STR. OF C.C.CUBE (FOR 6 NOS)	No.
8	CONCRETE	CONCRETE MIX DESIGN WITH CUBES (INLUDING DLC)	No.
9	STEEL	TENSILE STRENGHT INCLUDING YEILD STRENGTH & %ELONGATION	No.
		BEND & REBEND	No.
10	TILES/PAVER	FLEXURE TEST	No.
	BLOCK/FLOORING(SET	DIMENSION	No.
	OF 6 NOS)	WATER ABSORPTION	No.
		FLATNESS OF TILES SURFACE	No.
		DETERMINATION OF STRAIGHTNESS OF CEMENT CONCRETE FLOORING	No.

	1		1		
	NAVATED.	CUCREALS			
11	WATER	SUSPENDED	No.		
		MATTER,ORGANIC			
		MATTER,CHLORIDE			
		CONTENT, INORGANIC			
		MATTER & pH VALUE			
12	DCC DIDE (DED DIDE)	LICOR TECT CRACK	No		
12	RCC PIPE (PER PIPE)	HOOP TEST-CRACK,	No.		
		LOAD TEST, % REINFORCEMENT			
		REINFORCEIVIEIVI			
13	BITUMEN	SPECIFIC GRAVITY	No.		
13	DITOIVILIN	SOFTENING POINT	No.		
		VISCOSITY	No.		
		PENETRATION	No.		
		LOSS ON HEATING	No.		
		DUCTILITY	No.		
		BINDER CONTENT	No.		
14	BITUMENOUS MIX	Individual gradation	No.		
<u> </u>	STI CIVILIVOUS IVIIA	Dry mix gradation	No.		
		Binder content of mix	No.		
		material			
		Marshal Stability &	Per set.		
		flow test			
		GMM test	No.		
		Density of compacted layer	No.		
		Stripping test	No.		
		Stone polising value	No.		
		Tray test for spreading	No.		
		rate of bitumen.			
16	Surface regularity test	Any layer	Per km per		
	by straight edge		lane		
47	method	MANA AC DED IDC	NI -		
17	WET MIX MACADAM	WMM AS PER IRC	No.		
	– MIX DESIGN				
18	BITUMINOUS MIX	BM/SDBC/BC	No.		
ΤQ	DESIGN	DIVI/SUBC/BC	NO.		
19	Crust Design of flexible	AS per IS/IRC	Per lane per		
1.5	Pavement	7.5 pci 15/11/C	KM.		
20	Crust Design of Rigid	AS per IS/IRC	Per lane per		
	Pavement	, .	KM.		
21	Hammer rebound test	As per IS	No		
22	Carrying out detail	AS per IS/IRC	Per KM.		
	topography level work				
	using DGPS and				
	preparation of site plan				
	and taking cross section				
	longitudinal section, details at 30 m interval				
	on straight road and				
	on straight road and		1	1	

	15m at curve portion			
	survey including details			
	of centre of BT B.T ende			
	shoulders, drains right			
	of way, trees ,electric			
	posts, building and any			
	other man made			
	structure within survey			
	limit including preparing			
	L/S, C/S level sheet with			
	all necessary			
	calculations of cutting			
	filling & layer wise with			
	optional quantity etc.			
	should be provided			
	complete as per			
	·			
	instruction of engineer			
	incharge.			
	a) Two lane(upto 10.0 M)	AS per IS/IRC	Per KM.	
	b) Four lane	AS per IS/IRC	Per KM.	
	c) More than four lane	AS per IS/IRC	Per KM.	
20	Bump integrator test	AS per IS/IRC	Per KM./per	
			lane	
21	Ultrasonic Pulse Velocity	AS per IS/IRC	Per point	
	This test is done to assess the	- ,,		
	quality of concrete by			
	Ultrasonic Pulse Velocity			
	Methodas per IS:13311(part-1)-1992 the underlying			
	principle of this testis The			
	method consists of measuring			
	the time of travel of an			
	ultrasonic pulse passing			
	through the concrete being			
	tested . Comparatively higher			
	velocity is obtained when			
	concrete quality is good in			
	terms of density, uniformity, homogeneity etc			
	nomogeneity etc			
22	Thermoplast (Titanium	AS per IS/IRC	Per Test	
	dioxide)			
	Determination of TiO2			
	pigment in the thermoplastic			
	paint using chemical analysis			
	percent Titanium Dioxide by			
23	chemical analysis Glass beed	AS par IS/IDC	Per Test	
	Gradation as per MoRTH, Sec	AS per IS/IRC	rei iest	
	803.4.3.3			
24	Paint	AS per IS/IRC	No.	
	Consistency (IS 101, part-1	, ,		
2.5	sec. 5-1989)			
25	Drying time (IS 101, part-3	AS per IS/IRC	No.	
26	sec. 5-1986) Finish (IS 101, part-3 sec. 4-	AC par IC/IDC	No	
	1987)	AS per IS/IRC	No.	
27	Flexibility & Adhesion after			
	48 Hrs (IS 101, part-5 sec.2-			
	1988)			
	1			

28	Flyash Test (physical test as per IS 3812)	AS per IS/IRC	No.	
29	Flyash Test (chemical test as per IS 3812)	AS per IS/IRC	No.	
30	Lime Cao content	AS per IS/IRC	No.	
31	Road safety audit	AS per IS/IRC	Per Km.	
32	Axle load survey	AS per IS/IRC	Per location.	

Deputy Executive Engineer Rajkot Urban Development Authority Rajkot Director (Project)
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