

TENDER REF: 6300039286				Date:08.01.2025	
Issued to			Period of Contract:	30 Days	
			EMD:Rs.	8,860/-	
Sub:-Consultancy services for conducting the structural stability test of BEML Kalamandira building, BEMLTownship, Bangalore.					
Bill of Quantities					
SI No	Description of work	Unit	Qty.	Rate/ Unit in fig. and in works Rs.	Amount Rs.
1	<p>The scope of work of the Consultancy services shall be as follows:</p> <p>A) As built drawing preparation:</p> <p>1. Visual Inspection of entire RCC structure, Locating Columns, beams & slab members.</p> <p>2. Excavation for sample foundation min 1 no's to identify the depth & sizes of foundations.</p> <p>3. Physical measurements on site with the laser equipment.</p> <p>4. Preparing on site sketches/ section of the elements.</p> <p>5. GPR based reinforcement scanning for identification of the reinforcement in typical RCC elements.</p> <p>6. Chiseling out / Core cutting of 50mm Dia at typical location to identify dia. of reinforcement.</p> <p>7. Preparation of reinforcement detail drawings for typical elements.</p> <p>B) NDT & Condition assessment report :</p> <p>1. Visual Inspection and Site Survey. Detailed visual inspections of all structural elements.</p> <p>2. Inspection of critical load carrying elements for current condition.</p> <p>3. Locate deteriorated areas wherein closer observations are possible. Surface defects including cracks, honey combing, rust staining, reinforcement corrosion, delaminated concrete efflorescence and spelling.</p> <p>4. Exposed reinforcement and any other type of defect encountered to be documented and summarized and photographically illustrated for representative areas.</p> <p>5. Condition of steel reinforcement to be categorically specified along with the observed corrosion of the exposed members.</p> <p>C) Non Destructive Tests (NDT) to be undertaken.</p> <p>1. UPV Test: - (IS 516 Part 5 Sec 1 :2018) by portable ultrasonic non destructive digital test equipment including chipping out plaster at upto 20 strategic locations.</p> <p>2. Rebound hammer Test - (IS 516 Part 5 Sec 4 :2020) by portable rebound hamme equipment at upto 20 strategic locations.</p> <p>3. Cover Meter Test - - (BS 1881 Part 204:1988)</p> <p>4 Core test :- Core cutting and compression test (IS 516 Part 4:2018) for RCC structure in accordance with IS:516 on RCC members. 70 mm core cutting in reinforcement concrete, core filling by speialized epoxy material/micro concrete with bond coat at upto 3 strategic locations.</p> <p>5 Half-cell potential Test - (ASTM C-876:2015) at upto 5 strategic locations.</p> <p>6 Carbonation Test - (BS EN 14630:2006) at upto 5 strategic locations.</p> <p>7 Chemical Testing (pH, Cl, Sulphate) - (BS-1881 Part 124(2015) IS 2720 P -26-1987 (2002) at upto 3 strategic locations</p> <p>The testing shall be carried out under NABL accredited laboratories as applicable.</p>	Job	1		

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	<p>D) Reporting: All visual inspection reports and test reports shall be quantitative in nature, clearly outlining the credibility of each test. Checking and confirming the present status of structure on basis on NDT results & visual inspection. The scope shall also include travelling, lodging-boarding, testing equipment, Excavation for foundation required for the project.</p> <p>E) Feasibility Check for extension: All NDT & Structural data shall be gathered to generate Auto-CADD as well as STAAD modelling.</p> <p>F) DELIVERABLES: GPR based scanning of reinforcement & preparation of RCC typical detail drawings. Documentation of distresses identified location wise for each structure. Performing, Reporting & Analyzing Listed ND Testing. Repair Methodology : To provide recommendation for structrue repairs and technical specification. Preparing bill of quantities for the repair etc. All as specified and directed. Comprehensive condition assessment report.</p>				
	Total Value of work excluding GST/Taxes (Rs.)			Rs.	
	GST/ Taxes			Rs.	
	Total value of work inclusive of Taxes			Rs.	

(Total Amount in words Rupees.....)

Signature of Consultant with Seal