Inviting Techno-Commercial Proposal for carrying out stability test for Three-Star Beach Resort at Muzhuppilangad in Kannur district



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II. About Us

KIIFCON Private Limited (KIIFCON), a wholly owned subsidiary of Kerala Infrastructure Investment Fund Board (KIIFB), offers consultancy services including professional technical services, sustainable and innovative solutions for infrastructure development.

KIIFCON aims to revolutionize Kerala's infrastructure sector by providing expert technical services to engineering organizations. Their focus spans across various sectors, including transportation, buildings, energy, urban infrastructure, and public-private partnerships (PPP) transactions.

KIIFCON offers a diverse range of services designed to meet the needs of various sectors. Major Key Service areas of KIIFCON are outlined below:

- Consulting & Advisory Services
- > Environment Services
- Design & Engineering
- Project & Contract Management
- Geographic Information System
- Quality Management

Terms of Reference

III. Backdrop

The resort has a total built up area of 5591.00 sqms spread over 10 blocks intended for various purposes comprising of a main block with reception, two suite blocks, four cottage blocks, an ayurveda spa, staff & managers quarters, and driver's dormitory block. Except for the ayurveda spa block and driver's dormitory which are single story structures, all the other blocks are planned as G+1.

IV. Scope of work

- 1. Detailed inspection and physical observation of the existing structure for understanding the Structural system.
- 2. Ultrasonic Pulse Velocity test on RC members of selected at random to assess the quality of concrete as per IS 516 Part 5/Sec-1:2018, (Amendment November 2019).
- 3. Rebound hammer test on RC members of selected at random to assess the insitu strength of the concrete near to surface as per IS 516 Part 5/Sec-4:2020.
- 4. Cover meter study on RC members at random to assess the thickness of cover concrete and probable diameter of peripheral rebars as per IS 1881Part 204:1988.
- 5. Concrete core extraction for assessing the compressive strength of concrete in RC members as per IS 516 Part 4:2018.
- 6. Crack width measurement using crack scope & Crack depth measurement using Ultrasonic Pulse Velocity test at random.
- 7. Chemical analysis of concrete for assessment of chloride content as per IS: 14959 part II-2001, Sulphate Content as per BS: 1881 (Part 124)-2015 and pH value as per IS: 2720 (Part 26): 1987 (RA 2021) of concrete through samples collected at site.
- 8. Theoretical analysis and design verification based on the data collected at site, results of test and considering the present level of loading for stability.
- 9. Furnishing detailed report along with results of tests, drawings, photographs and recommended measures with specification.

NDT on RC Structures shall be done with random sampling of about 20% of the identified structures covering Columns, Beam, slabs etc at accessible locations. The test locations for testing shall be decided based on visual inspections.

V. Deliverables

- 1. Physical Observations
- 2. Probing Tests and results of test
- 3. Inferences
- 4. Theoretical verification and design check

- 5. Restoration/Remedial measures.
- 6. Concluding remarks
- 7. Tables
- 8. Sketches
- 9. Specifications
- 10. Photographs

VI. General Conditions

- > Proposals shall remain valid till 30.09.2025.
- > During this period, the Consultant shall maintain its original Proposal without any change in the proposed rates and the total price.
- > Only NABL Accredited Testing Laboratory quote proposal shall be accepted.
- > Payment shall be made only after submission of final test report.
- > The rates quoted shall be inclusive of GST.
- The proposal shall be submitted on or before **30.05.2025**, **3PM** in a **sealed cover** titled "Techno-Commercial Proposal for carrying out stability test for Three-Star Beach Resort at Muzhuppilangad" to the following address:

The Director(P&E)
KIIFCON, 7th Floor, Felicity Square,
MG Road, Thiruvananthapuram- 695001,
Kerala.

Any clarification/ communication may be addressed to bd@kiifcon.com.

VII. Bill of Materials

| No. | Item of Work | Unit | Qty | Rate | Amount |
|-----|---|------|-----|------|--------|
| 1 | Mobilization/Demobilisation of personal and | LS | 1 | | |
| | equipment to project site at Thalassery, | | | | |
| | Kannur. This also include 1. Provision for | | | | |
| | messing and accommodation of field testing | | | | |
| | & inspection crew deputed to site and also | | | | |
| | setting up at test location. 2. Detailed | | | | |
| | physical observation of the buildings and | | | | |
| | verification of structural & architectural | | | | |
| | drawings. 3. Dimensional verification of | | | | |
| | typical RC members/foundation and study of | | | | |
| | structural system. | | | | |

| 2 | Carrying out Rebound Hammer test on RC | Per | 30 | | | |
|------|--|------|--------|--|--|--|
| _ | members at random to assess the | Test | | | | |
| | compressive Strength of concrete. | | | | | |
| 3 | Carrying out Ultrasonic Pulse Velocity test on | Per | 30 | | | |
| | RC members at random to assess the Quality | Test | | | | |
| | of in-situ concrete. | 1030 | | | | |
| 4 | Carrying out Profometer studies on typical | Per | 30 | | | |
| _ | RC members at random for detecting the | Test | | | | |
| | disposition of embedded peripheral rebar, | 1030 | | | | |
| | come out with probable diameter and | | | | | |
| | thickness of cover concrete. | | | | | |
| 5 | Extraction of concrete core samples at | Per | 6 | | | |
| | random from RC members to assess the | core | | | | |
| | compressive strength of concrete. | COIC | | | | |
| 6 | Chemical analysis of concrete samples for | Per | 6 | | | |
| | chloride, sulphate & pH. | core | | | | |
| 7 | Crack Width Measurement using crack | NA | At | | | |
| / | scope & Crack depth measurement through | INA | Random | | | |
| | ultrasonic pulse velocity instrument | | Nanuom | | | |
| | wherever applicable at Random | | | | | |
| Repo | 7 7 | | | | | |
| | Preparation and submission of detailed | LS | 1 | | | |
| 8 | · | LS | 1 | | | |
| | report incorporating 1. Furnishing detailed | | | | | |
| | report with expert recommendations along | | | | | |
| | with results of test, outcome of study, | | | | | |
| | sketches, specifications, photographs etc. 2. | | | | | |
| | Theoretical analysis & design verification as | | | | | |
| | per the present level of loading to ascertain | | | | | |
| | stability of structure. | | | | | |
| Tota | Total (including GST) | | | | | |
