

| BOQ for Structural Audit, Non-Destructive Test of Structures at DND Flyway | | | | | |
|---|--|-----|------|------|--------------------|
| S. No. | Descriptions | Qty | Unit | Rate | Total Amount (Rs.) |
| 1 | Distress Mapping based on existing drawings: Site visits by qualified and experienced civil engineer for visual inspection by light tap hammer, crack gauges etc. submission of visual inspection report of the structure including photographic evidence and Preparation of Distress drawings including structural crack-crack mapping using crack gauge, identifying delamination, spalling/ honeycombed areas, damp locations, discolorations etc. Marking damaged areas on drawing for record and future references. | 65 | Each | | |
| 2 | Material characterisation of the existing structure by ND / PD Testing Conducting adequate / required number of following NDT/PDT on concerned structure, preparation & submission of ND / PD test report. For RCC Elements | 65 | Each | | |
| (i) | Quality Parameters for RCC Members | | | | |
| a. | Ultrasound pulse velocity tests for establishing the integrity and soundness of concrete (Ref. IS 516: Part 5: Sec 1: 2018. Amendment No. 1 Nov 2019) | | | | |
| b. | Schmidt's rebound hammer test for determining the concrete compressive strength (Ref. IS 516: Part 5: Sec 4: 2020) Strength Parameters | | | | |
| (ii) | Quality Parameters for Steel Members | | | | |
| a. | Ultrasonic Testing of metallic sections :- Steel plates/Tube/Pipe/weld/Forging/ Casting/ as per ASTM A-435/A435M-82 ASME Sec V, range(0mm-5000mm) for assessment of welding/joints | | | | |
| b. | Hardness Testing of metals :- Hardness of Ferrous & Non-Ferrous Metals/Alloys Vickers 80-94; HRC17.9-68.5 HRB 13.5-99.5, LD 200-900, HB 82.0-940.0 to get the type of material and its estimated tensile strength | | | | |
| c. | Structural stability analysis by model analysis :- to check the vulnerability analysis, structural deficiencies and structural stability analysis of overall structure, computer model of existing structure will be analysed as per present loading criteria; In the structural analysis of existing structure, we will use the results of NDT of the material/available properties of existing materials | | | | |

Terms & Conditions

- Rates are Excluding of GST.
- TDS will be deducted as per applicable laws.
- Time allowed for work is 15 days.
- The work will be executed as per CPWD Specification/as per existing design & pattern of DND Flyway.