**STRUCTURAL AUDIT HIGHLIGHTS**

**Background :**

* MCD issued a public Notice dated 18thJune’20 for safety of building against earthquake.
* MCD made structural audit mandatory for old building/ society.(Prior 20th March 2001 sanction of building plan)
* Accordingly, between Aug’20 – Nov’20, EOI issued to 7 MCD empanelled structural engineering auditors.

**Selection of Structural Auditors after Due diligence**

* Response received from 3 auditors; **DR Associates, SanRachna and Deo Engineering**.
* Feed back of other society where DR Associates and SanRachna has already worked, taken.
* MC visited nearby Society (Elephanta) where same work already been carried out to gather their experience of the work and to get a feel of work in terms of volume and the cost.
* Collecting all necessary information, enquiry with price format issued to selected auditors. Offer received are evaluated technically and commercially.
* Order negotiation held on 27th Feb’21 followed by Work Order release in March’21 to L1 party**.(SanRachna)**

**Execution and submission of final reort**

* Methodology/ technology used to assess the strength and status of existing structure were;
  + Rebound Hammer as per IS Standards
  + Core cutting test for compressive strength.
  + Ultrasonic pulse velocity test to check quality of concrete.
  + Rebar Locator/Ferro scanning for rebar spacing.
  + Half-cell Potential test to check rebar corrosions
* Audit Report Received as Draft and Final.
* Final Report submitted and acknowledgement received from **Director Building (DDA) on 11th September’21**

**Final Recommendations :**

* Keeping in view of our budget constraint and high cost of overall structural retrofit work, the recommended construction is segregated in below phases :

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sn | Phase | particulars | Unnegotiated offered price (Lacs) | Work Start |
| 1 | Phase 1 | **Most essential** Columns where cracks are clearly visible (Basement) | **15-20** | **Immediately** |
| 2 | Phase 2 | **Essential** (common areas stilt floor) | **80-100** | Will inform |
| 3 | Phase 3 | **Remaining** (including of areas falling inside of residence house) | - | to be decided later |

**Support and help requested from Residence** :

To expedite blocking of seepage in case the individual house is the source of it.