STRUCTURAL CONDITION ASSESSMENT AND STABILITY REPORT OF SCHOOL BUILDING OF KENDRIYA VIDYALAYA AND STAFF QUARTERS, DHRANGADHRA

CLIENT

PM SHRI KENDRIYA VIDYALAYA DHRANGADHRA

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BY

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5. CONCLUDING REMARKS AND RECOMMENDATIONS

Based on the detailed visual inspection and past experience, the following critical remarks have been drawn:

➢ For the school building & Staff Quarters

- Due to the aging of the School buildings, water seepage occurs in most classrooms. Plumbing work and waterproofing work are required in the toilet. On the terrace slab, the existing Asphalt layer is damaged, so it is recommended to remove it and provide proper water proofing. These buildings do not comply with the current provisions of the Indian standard codes of practice.
- Due to the aging of the Staff Quarter buildings, the steel reinforcement –concrete bond weakens, resulting in deterioration or cracking in most structural elements. Since the quarters' slabs are sloping and badly damaged due to water seepage and reinforcement corrosion, it is highly recommended to provide flat RCC Slabs by removing the sloping slabs. The plaster was removed from the majority of the building. Further water seepage issues occur in most rooms. The external masonry walls, lintels, and drainage were severely damaged. These buildings do not comply with the current provisions of the Indian standard codes of practice.
- Upon analysing the current condition of the buildings, it appears that repair or strengthening is advisable. Proper RCC work, Waterproofing work, plastering work, and high-quality painting work are highly recommended. Moreover, the buildings would not fulfil all aspects of the current Indian codes of practice.

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- After careful repair/retrofitting, as recommended in a report by an experienced contractor using standard materials under the supervision of a qualified engineer, the building's lifespan may increase, and it can be used for its intended purpose (School). It is preferable to do structural auditing every 2 Years by a competent authority. In the event of any future interior modification, it is important to refrain from making modifications to structural components such as beams, columns, or slabs, including breaking or altering these elements

To arrive at a techno-economical-socio solution, it is strongly recommended that the building be repaired on campus immediately to prevent any accidents and unauthorized uses.

6. PRECAUTIONARY NOTES

- The buildings are affected by water seepage. Provide high-quality waterproofing work as soon as possible to prevent further damage from dampness.
- Appropriate warning signboards must be installed at the entrance and around the building.
- During the demolition of the building, the client must follow the guidelines mentioned in the Indian code of practice, IS 4130 (1991).
- The buildings pose a danger to users and surrounding properties.
- Appropriate warning signboards must be installed at the entrance and around the building.
- During the demolition of the building, the client must follow the guidelines mentioned in the Indian code of practice, IS 4130 (1991).

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9. ANNEXURE

NDT test readings were taken and compiled in Annexure A, and Photographs of the buildings were taken and compiled in Annexure B

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