NATIONAL INSTITUTE OF DISASTER MANAGEMENT (Ministry of Home Affairs, Govt. of India) IIPA Campus, New Delhi 110 002

Sub: Quotation for building material testing and result analysis in Lalita Park building collapse (Lakhmi Nagar), East Delhi

Tender Document

Sealed quotations are invited by NIDM, New Delhi for building material testing and result analysis of Lalita Park building collapse (Lakhmi Nagar), East Delhi on the following terms and conditions.

Eligibility:

- 1. The Firm should be a reputed organisation in the field of geo environmental engineering, testing of water and building materials
- 2. The firm should have a minimum 5 years of continuous experience in providing such services to Government or international Organisations.

Job Content:

Due to sudden collapse of one multistorey building at the Laxmi Nagar, East Delhi, 71 people were killed and injured many. Govt. of Delhi constituted an Inquiry Commission under the Chairmanship of Justice (Retd.) Shri Lokeswar Prasad. As per TOR given to the Commission it is required to investigate the proximate and immediate causes of the failure. The prima facie examination brought out that building was suspected to have weakened due to the heavy rains during last monsoon followed by incipient seepage into the basement. Ground water table in the entire locality were found above the basement floor thus resulting in the inundation of basements of many other buildings. It is understood that little or insufficient measures were taken up by owner/construction agency for the basement against such seepage during construction.

Under directives of Chairman, Commission of Inquiry, NIDM has been entrusted to conduct forensic examination of the above building. In order to examine various causative factors, NIDM has taken up various geotechnical, geophysical and structural integrity testing in addition to ascertain about foundation size and their positions. While carrying out excavation of the basement excessive corrosion in the rebars were noticed. Core sample of concrete showed hair cracks. Due to prolonged water logging and seepages from surface drains, load bearing members at the basement may have been weakened.

Understanding the gravity of the problem, we require conducting physical, chemical and microbiological examination of water, soil, concrete, building materials and expert advice on the same subject.

A. Complete water and waste water parameters to be checked for at least three representative samples:

- 1. Physical (pH, Turbidity, Conductivity etc)
- 2. Chemical (TDS, Sulphate, Iron, Chlorite, Mn, Mg, Ca, etc.)
- 3. Microbiological (Total Coliform, Faecal coliform, E.Coli, etc)\
- 4. Sulphate Reducing Bacteria (SRBs)/ Microbiologial Induced Corrosion (MIC)

- B. Complete Soil testing parameters to be checked
 - 1. pH
 - 2. Shrinkage, Plastic and Liquid Limit of the soil
 - 3. Humic Acid
 - 4. Fulvic acid
 - 5. Phosphate content
 - 6. Copper content
 - 7. Iron oxide content
 - 8. DOC
 - 9. Organic matter
 - 10. Clay content
 - 11. Sulphate content
- C. Complete Concrete testing parameters
 - 1. Depth of Carbonation
 - 2. Chloride Content
 - 3. Cement Content
 - 4. Sulphate Content
 - 5. Type of Cement
 - 6. Alkali Content
- D. Testing of Bricks water absorption
- E. Yamuna River water tests & pollution source characteristics

Bidding procedure:

The bids should be submitted in two parts as detailed below:

Part A - Techno Commercial Bid :

Techno Commercial Bid should be submitted in prescribed format mentioned in Annexure-A. It should contain the following :-

- Earnest Money Deposit of Rs 5000/- in the form of crossed bank draft or pay order issued by a scheduled bank in favour of N.I.D.M., New Delhi
- List of Clients to whom the service has been provided/being provided (Govt. and International organisations) during the last 5 years.

Part B - Price Bid

Quoted Price shall include complete set of tests as prescribed in the "Job Content" The price shall include all services required during testing, sampling, transport & all other taxes.

Both Bids should be submitted in separate sealed envelopes duly superscribed as part A Techno commercial and Part B commercial bid. Both the bids should then be put into a single sealed envelope.

Terms & Conditions:

- 1. Quotation should be free from correction and erasers.
- 2. Quotations received after the specified time and date will not be entertained.
- 3. We reserve to ourselves unfetter right to reject any or all suppliers without assigning any reasons thereof
- 4. All prices quoted must be firm and no revision in the price quoted is allowed after quotations are opened.

- 5. Price quoted should be inclusive of service and all other taxes and this should be clearly specified in quotations. In the absence of any such stipulation, it will be presumed that the prices quoted are inclusive of all taxes.
- 6. Price quoted should be valid for 180 days.

Submission of Bid and Last date:

Sealed quotation along with this form superscribed on the envelop **'Lalita park building collapse - investigation'** should reach 'Executive Director, 5-B I.P. Estate, Ring Road, New Delhi 110 002' on or before **4**th **April 2011**, by 3PM. Quotation submitted via emails/fax telex etc are not acceptable. Incomplete quotations in any respect will be summarily rejected.

All quotations will be opened on 4^{th} April 2011 at 4PM in the presence of bidders or their authorised representatives, if any.

Date: March 24, 2011

(Ramesh Kumar)

/lamor)

Account Officer

Annexure-A

Format of Techno Commercial Bid

Sno	Item	Details
1	Name of the firm	
2	Address for communication	
3	Description about technical competence	
4	List of Govt./International organisation to whom the service rendered during the last 5 years	
5	Details of Earnest Money Deposit	

Certify that the above stated information are correct and our firm fulfils the eligibility conditions stated in the Tender form.

Authorised Signatory