

Indian Institute of Technology Madras

Chennai - 600 036

STORES & PURCHASE SECTION

Form for Inviting Quotations

Ref.No. CIE-ARUM 2014 Impact Echo SPLX Date: 12.11.2014

DUE DATE:03.12.2014

ROJECT COORDINATOR

Dear Sir/Madam,

- 1. Quotations are invited in duplicate for the item shown below / overleaf / Enclosed list
- The Quotations duly sealed and superscribed on the envelope with the reference No. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above.
- The Quotations should be valid for sixty days from the due date and the period of delivery required should also be clearly indicated.
- 4. If the item is under DGS&D Rate contract No. and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the Rate contract price (Please note that we are not Direct Demanding Officers). If so please send copy of the RC.
- 5. Relevant literature pertaining to the items quoted with full specifications(and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples if called for, should be submitted free of charges, and collected back at the supplier's expenses.
- 6. Local Firms: Quotations should be for free delivery to this Institute. If Quotations for Ex-Godown delivery charges should be indicated separately.
- 7. Firms Outside Madras: Quotations should be for F.O.R. Madras. If F.O.R. consignor station, freight charges by passenger train / lorry transport must be indicated. If Ex-Godown, packing, forwarding and freight charges must be indicated.
- 8. The rate of sales / General Taxes and the percentage of such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for Sales / General Taxes will be admitted at any stage and on any ground whatsoever The taxes leviable should take into consideration that we are entitled to have concessional Sales Tax applicable to non Government Educational Institutions run with no profit motive for which a concession. Sales Tax Certificate will be issued at the time of final settlement of the bill.
- 9. Goods should be supplied carriage paid and insured.
- 10. Goods shall not be supplied without an official supply order.

11. Payment: Every attempt will be made to make payment within 30 days from the date of receipt of bill / acceptance of goods, whichever is later.

Quotations to be sent to:

Dr. ARUN MENON
PROJECT COORDINATOR
DEPT. OF CIVIL ENGINEERING
IIT MADRAS, CHENNAI - 600 036

Department of Civil Engineering, IIT Madras

Specifications for

IMPACT ECHO SYSTEM FOR CONCRETE

The impact echo system is used for defect identification and mapping in structural members, including depth of surface cracks, location and extent of internal cracks, delamination and honeycombing, as well as determination of thickness of concrete in structural members such as pavement slabs and retaining walls (as per ASTM C1383-98a).

The following are the mandatory requirements for the Impact Echo system:

- 1. Compliance with ASTM C1383-98a.
- 2. Portability to enable easy on-site use; total weight of the instrument should be less than 5 kg.
- 3. The frequency range of the displacement transducer should be 500 100000 Hz
- 4. Cable lengths of at least 7 m should be provided
- The computer should have an easy to view screen in different light settings; up to 6-8 hours of battery time should be provided for on-site use of the instrument; a weather resistant rugged plastic hard case should be provided that can handle on-site conditions.
- 6. Signal conditioning and data acquisition systems provided should be state of the art.
- 7. The software for data analysis should be easy to use with automatic data collection with full display of current waveform and thickness versus distance plot; also, plots allowing 2-D visualization of multiple echo thicknesses on a single plot for a single scan should be possible.

PROJECT CO ORDINATOR