NOTICE INVITING QUOTATION (NIQ)

Date: 18/09/2012

Sealed quotations on company letterhead are invited from reputed manufactures in India, abroad or their authorized suppliers/ dealers and service agents in India for the supply of the *Licenses for SAP2000 & ETABS softwares*. The quotation must provide detailed information of the configuration and specifications of the items as well as price and terms and conditions of the payment. The quotation should mention the total cost of installation, commissioning, and demonstration at IIT Delhi site.

The quotation should be submitted on or before 03th October, 2012 by 5:00 PM in the office of the Head, Department of Civil Engineering, Room No. 221, Block No. IV, Indian Institute of Technology Delhi, Hauz Khas, New Delhi - 110 016 (INDIA). The validity of the submitted quotation must extend up to at least three months. Interested parties are required to submit their technical and financial bids in separately sealed envelopes and marked respectively as "Technical Bid" and "Financial Bid" on the outside. The two envelopes should be enclosed inside a single large envelope and marked, "ATTN: Dr. Dipti Ranjan Sahoo, Sealed Quotation for *Licenses for SAP2000 & ETABS softwares* to be opened by Purchase Committee".

| Sr. No. | Item Name and Specifications | Quantity |
|---------|--|-------------|
| 1. | SAP 2000 software - Physical modeling features | 40 Licenses |
| | ✓ Unlimited model joint size, unlimited objects (line/area/solids), Section designer, Database of all standards (Indian and International) hot-rolled, aluminum and cold-rolled sections, Interactive database spreadsheet editing | |
| | Analytical modeling features ✓ Automatic meshing tools, Tendon/cable/frame/shell elements, Solid/Plane- stress/Plane-strain elements, Nonlinear frame/link elements, Gaps/hooks/dampers/isolators plasticity elements | |
| | <i>- Loading features</i> ✓ Point, line, trapezoidal and area loads, Applied displacement loading, Pressure loading, Wave loading, Moving loading, Code-based seismic and wind loading | |
| | Analysis features ✓ Fast advanced solver technology, Eigen-value analysis, Multiple response spectrum cases, Linear modal and direct integration time-history analysis, Frequency domain analysis, Power spectral density analysis, Buckling analysis, Nonlinear analysis (Static, Dynamic, Staged construction, Creep and shrinkage), Hyperstatic analysis | |
| | - Design features ✓ Steel frame design (Indian and International standard design codes), Aluminum frame design, cold-formed frame design, Concrete shell required reinforcement display, Load combinations convertible to nonlinear load cases | |
| | - Output and display features ✓ Deformed and undeformed geometry in 3D, Loading and force/stress | |

| | diagrams, Force-deformation plots, Capture to graphics, Video animations, Customized report generation | |
|----|---|-------------|
| | - Import and export features ✓ Format for import and export should compatible with Microsoft access, Microsoft excel, Export to Perform-3D, AutoCAD, Frameworks, IGES, IFC, Prosteel | |
| 2. | ETABS Nonlinear software | 30 licenses |
| | - Modeling features ✓ Object Based Graphical Interface, Model Templates for Most Steel & Concrete Building Systems, Beam/Column/Brace Frame Objects, Wall/Slab/Deck Shell Objects with Internal Meshing, Story Definitions using the Concept of Similar Stories, Editing with Move, Merge, Mirror and Replicate, Accurate Dimensioning with Guidelines and Snapping, Rigid, Semi-Rigid and Flexible Floor Diaphragm Definitions, Auto Line Constraints for Mismatched Wall Meshes, Automatic Generation of Code Lateral Wind and Seismic Loads | |
| | -Analysis features ✓ Static and Dynamic Analysis for Frame/Shear Wall Buildings, Response Spectrum Analysis with Eigen or Ritz Vectors, P-Delta Analysis, Automated Center of Rigidity Calculations, Gravity, Pressure and Thermal Loading, Frame Objects Drawn as Physical Members, Seismic Acceleration or Displacement Time History Analysis, Wind Load Forcing Functions, Explicit Panel-Zone Deformations, Construction Sequence Loading Analysis, Nonlinear Static Pushover Analysis, Viscous Dampers, Base Isolators, Gap Object for Structural Pounding, Nonlinear Time History Analysis, Large Displacement Analysis | |
| | Display features ✓ 3D Perspective Graphical Displays, Static Deformed and Mode Shapes, Loading Diagrams, Animation of Deformed Shapes, Force Diagrams and Stress Contours, Integrated Force Diagrams for Wall Piers and Spandrels, Selective Results Displayed On-Screen with Right-Button Click, Tabular Display of Model Input & Output, Graphical Section Cut Definitions for Forces and Stresses, OpenGL Viewer, Display of Displacement and Force Time History Records, Time History AVI Files, Response Spectrum Curves from Time History Analysis, Nonlinear Force-Deformation Plots, Graphical Display of Nonlinear Hinge Status | |
| | Design features ✓ Steel and concrete frame design for Indian & International Codes, Composite Beam Design for American, British & Canadian Codes, Concrete Shear Wall Design for American, British & Canadian Codes, Design for Static and Dynamic Loads, Member Selection and Optimization, Automatic Tributary- Area Live Load Reduction, Graphical Section Designer for Complex and Built- Up Shapes | |

NOTES:

Terms of Conditions:

- A complete set of Manuals for operation, maintenance and safety should be provided. All Documents and Manuals should be in English language.
- Documentation related to licenses is to be provided in the name of IIT Delhi.

- A proprietary certificate from Computers & Structures, Inc. must be submitted along-with the bids.
- Each of the essential specification needs to be responded. Bidder should also provide the time frame of the delivery. <u>Failure to respond to any essential specification can lead to disqualification.</u>
- Vendor should provide reference of supply of licensed within India or outside. Any negative comments from any one referred would disqualify the bid. IIT Delhi reserves the right to interact/ visit with the referred customer as per its convenience.
- The quoted cost should include taxes and freight to IIT Delhi. The cost should include installation, deputation of competent engineers for installation and systems required for smooth running of the equipment.
- Pre-installation requirements, if any, should be mentioned along with their detailed technical specifications. All these items should be provided within 2 weeks of Supply Order placement so that IIT Delhi can prepare the installation requirements well in time.
- Vendor is required to supply, install and ensure proper commissioning of the equipment within 30 days of the Supply Order.
- The supplier should demonstrate the performance of the equipment to the specifications by conducting trial tests at the Computational Laboratory, Department of Civil Engineering.
- The Institute reserves the right to accept/ reject any/ all the offers without assigning any reason whatsoever.
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(Prof. B. Bhattacharjee)