

## Awarded Contracts for External Experts to Support the NIST World Trade Center (WTC) Disaster Investigation

| <b>Contract No.</b>       | <b>Awarded to</b>              | <b>Date Awarded</b> |
|---------------------------|--------------------------------|---------------------|
| SB1341-03-W-0713 (Area 1) | Skidmore, Owings & Merrill LLP | 6/23/2003           |

### **OUTSIDE EXPERTS FOR BASELINE STRUCTURAL PERFORMANCE, IMPACT ANALYSIS, STRUCTURAL RESPONSE TO FIRE, COLLAPSE, ETC.**

Under solicitation number SB1341-03-Q-0322, firm fixed-price purchase orders have been awarded to experts in five technical areas for their experience and judgment at the most senior professional level to provide expert technical assistance as follows:

#### **Area 1: Analysis and Design of High-Rise Steel Buildings**

A purchase order for Area 1 has been awarded to four experts from Skidmore, Owings & Merrill LLP (SOM) Structural Engineering Office in Chicago, Illinois. They are recognized international leaders in the design of tall buildings and specialize in design and analysis of high-rise steel buildings and performing independent peer reviews. These experts are well qualified to conduct an independent, in-depth, third-party review and critique of the work conducted under contract SB1341-03-W-0332 for the development of structural databases from original computer printouts of the WTC towers, the development of reference structural analysis models, and the analysis of the baseline structural response of the towers under design wind and gravity loads. The specific tasks the experts will perform include:

- In-depth, written review and critique of the work done by the contractor. The review shall include: (1) random checks of the databases; (2) appropriateness of the models for their intended uses, and (3) appropriateness of the baseline performance analyses and accuracy of results.
- In-depth, written review and critique of the wind loading criteria developed by NIST.
- In-depth, written review of all interim and final reports produced by the contractor for development of models and baseline performance.

This expert team consists of four licensed structural engineers (SE) with relevant backgrounds and appropriate knowledge in structural design and analysis of high-rise steel buildings:

Mr. William F. Baker, PE, SE, is a structural engineering partner at SOM with over 22 years of structural engineering experience involving design of high-rise buildings, long span roofs, and special structures. He is a Fellow of the American Society of Civil Engineers (ASCE). He is widely recognized for his expertise in the fields of tall building design, innovative structural systems, and advanced structural analysis methods. His expertise has made him a frequent lecturer around the globe, and he is the author of numerous articles on innovation in structural engineering. Examples of his design projects include:

- AT&T Corporate Center, Chicago (1990): a 63-story office tower
- Structural engineering peer review of the Petronas towers, Kuala Lumpur, Malaysia (1996): two 88-story towers
- Jin Mao Tower, Shanghai, China (1998): a 88 story multi-use complex including office, hotel, and retail
- Plaza Rakyat Office Tower, Kuala Lumpur, Malaysia (1999): a 77 story tower

- 7 South Dearborn, Chicago (2002): a proposal for 110 story office, retail and residential tower

Mr. D. Stanton Korista, PE, SE, is a structural/civil engineering director at SOM with 38 years of structural engineering experience that includes about 200 projects around the world. His design and peer review work includes high-rise towers, hotels, educational projects, corporate headquarters, and residential towers. He is a distinguished member of more than twenty engineering associations, including several fellowships. Examples of his design projects include:

- AT&T Corporate Center, Chicago (1990): a 63-story office tower
- Jin Mao Tower, Shanghai, China (1998): a 88 story multi-use complex including office, hotel, and retail
- Xiamen Posts and Telecommunications Building, Fujian Province, China (2000): a 66-story office tower
- 7 South Dearborn, Chicago (2002): a proposal for 110 story office, retail and residential tower
- Tower Palace III, Seoul, South Korea (2003): a 73-story residential tower

Mr. John J. Zils, PE, SE, is a senior structural engineer and associate partner at SOM with about 37 years of structural engineering experience including many of SOM's best known and most complex structures. He is a fellow of the American Society of Civil Engineers (ASCE) and the American Institute of Architects (AIA). He has published numerous articles on engineering advancements, lectures frequently, and has served as an adjunct professor at the University of Illinois. Examples of his design projects include:

- The Sears Tower, Chicago (1974): a 110-story office building
- Onterie Center Tower, Chicago (1984): a 60 story residential tower
- Dearborn Tower, Chicago (1990): a proposal for 84-story office and retail complex
- 7 South Dearborn, Chicago (2002): a proposal for 110 story office, retail and residential tower

Mr. Robert C. Sinn, PE, SE, is a senior structural engineer and associate partner at SOM and has about 19 years of structural engineering experience ranging from high-rise buildings to long-span roofs. Mr. Sinn has extensive experience in computer-applied analysis and design techniques. He is a fellow of the American Society of Civil Engineers (ASCE). In 1999, he received ASCE's award for innovation in Civil Engineering for his work on the Guggenheim Museum, Bilbao, Spain. Examples of his design projects include:

- Structural engineering peer review of the Petronas towers, Kuala Lumpur, Malaysia (1996): two 88-story towers
- Plaza Rakyat Office Tower, Kuala Lumpur, Malaysia (1999): a 77 story tower
- Xiamen Posts and Telecommunications Building, Fujian Province, China (2000): a 66-story office tower
- 7 South Dearborn, Chicago (2002): a proposal for 110 story office, retail and residential tower