

News Release 18 January 2005

New Zealand consulting engineers Beca win large Earthquake Strengthening study in Istanbul

Beca International Consultants Ltd signed a multimillion dollar contract with the Turkish government in Ankara this week as the lead partner of a joint venture with Turkish consulting engineers Prota.

Beca's Director of Earthquake Engineering, Dr Richard Sharpe represented Beca at the signing in Ankara. Dr Sharpe was the leader of the New Zealand Society of Earthquake Engineering's team that inspected the damage in Turkey soon after the devastating 1999 earthquake that killed at least 25,000 people.

The eight-month project funded by the World Bank involves the feasibility study of the earthquake strengthening of 369 multi-storey apartment buildings in the Istanbul municipality of Bakirköy. This municipality surrounds the Istanbul International airport on the western side of the Bosphorus. There were a number of deaths from building collapses in this municipality in the devastating 1999 earthquake centred some 150 km to the east. There is a very high probability that this area will be severely shaken within the next 25 years as the North Anatolian fault continues its 250-year cycle of unzipping from east to west.

Dr Richard Sharpe is the Project Director, and Dr David Hopkins from David Hopkins Consulting in Wellington will be resident in Istanbul as the joint venture's project manager for the duration of the project. The specialist team from New Zealand also includes prominent Beca structural engineer Rob Jury, Grant Wilkinson from Holmes Group, and social aspects specialist David Johnston of the Institute of Geological and Nuclear Sciences. The four organisations are members of the Earthquake Engineering New Zealand business cluster who have been strongly supported by Positively Wellington Business and New Zealand Trade and Enterprise over the last six years in marketing New Zealand's earthquake engineering expertise internationally. The project was won in the face of strong international competition.

Beca has completed a number of major commissions in earthquake engineering over the last two decades, including the drafting of Indonesia's national building design code for earthquakes financed by New Zealand under a bi-lateral aid agreement, Nepal's national building code, and the same for Papua New Guinea. Beca also provides seismic design advice to some of New Zealand's largest industries.

At the contract negotiations with the Turkish Government a month ago, the Turkish Prime Ministry noted the eagerness with which they awaited the New Zealand input to this pilot project, New Zealand being well-known for its leadership in the mitigation of earthquake effects.

Beca is setting up a branch office in Turkey to partake in the joint venture. It is possible that Beca is the first New Zealand company to do this. It is particularly significant this year as it is the ninetieth anniversary of the Gallipoli campaign.

Dr Sharpe said in Istanbul today that “Winning this Istanbul project demonstrates the high regard in which New Zealand's earthquake engineering expertise is held internationally. New Zealand's expertise in earthquake strengthening is particularly relevant to the highly susceptible buildings in Istanbul. There are aspects of this study which will also be relevant to the application of New Zealand's recently passed Building Act which require local authorities to consider the susceptibility to earthquakes of buildings designed to lower than current requirements. Anyone who has visited the site of a devastating earthquake soon after the event appreciates that quite modest attention to good design and construction practices vastly improves the resilience of structures to earthquakes. Our joint venture partners in Turkey are clearly the best in their field in their country, and we look forward to a continuing association with them.”

Photos:



Dr. Richard Sharpe Beca's Director of Earthquake Engineering with engineers from Prota in the Istanbul site office.



Assessing the damage at one of the multi-storey apartment buildings in the Istanbul municipality of Bakirköy that was affected by the devastating 1999 earthquake that killed at least 25,000 people.



Some of the 369 multi-storey apartment buildings in the Istanbul municipality of Bakirköy that will be assessed for earthquake strengthening. There is a very high probability that this area will be severely shaken within the next 25 years as the North Anatolian fault continues its 250-year cycle of unzipping from east to west.

For further information:

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More information on the Beca group can be found on www.beca.com and on the Earthquake Engineering NZ business cluster at www.earthquakeengineering.com.