



Earthquake Engineering Research Institute
University of Notre Dame Student Chapter
156 Fitzpatrick Hall of Engineering
Notre Dame, Indiana 46556 USA
Email: erriund@nd.edu
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December 17, 2002

Ms. Sonya Hollenbeck
Member Relations
Earthquake Engineering Research Institute
499 14th Street, Suite 320
Oakland, CA 94612-1934

Dear Ms. Hollenbeck:

On behalf of the Department of Civil Engineering and Geological Sciences and the Student Chapter of the Earthquake Engineering Research Institute at the University of Notre Dame, we'd like to thank EERI for sponsoring the recent visit of John Hooper of Skilling Ward Magnusson Barkshire, Inc. as part of the Friedman Family Visiting Professionals Program. The visit was a tremendous success amongst our faculty and both our undergraduate and graduate students, who have limited opportunities to dialogue with practicing consultants.

Enclosed you will find a brief report which can be featured on the EERI website, his formal itinerary and our poster for his lectures. Throughout his visit, Mr. Hooper shared a number of experiences and candid thoughts with our students and faculty. We feel that the Friedman Family Visiting Professional Program is a tremendous benefit to the universities involved, and we were thrilled to be able to participate. It was a pleasure to host Mr. Hooper, and we look forward to a long relationship with the EERI Visiting Professional Program.

Sincerely,

Brian Morgen
President
bmorgen@nd.edu

Brad Weldon
Vice President

Tiphaine Williams
Secretary

Devin Brown
Treasurer

Hua Jiang
Webmaster

VISIT SUMMARY

The University of Notre Dame's EERI Student Chapter was fortunate to have Mr. John Hooper, SE of Skilling Ward Magnusson Barkshire, Inc. in Seattle, WA as part of the EERI Friedman Family Visiting Professionals Program.

Mr. Hooper was kept extremely busy throughout his visit at Notre Dame, arriving late in South Bend the evening before his scheduled seminars.

On the day of his lectures, Mr. Hooper started his morning off with a breakfast with EERI@UND President, Brian Morgen and Vice-President, Brad Weldon. Following that breakfast, John spent the remainder of the morning and much of the afternoon speaking with members of the Notre Dame structural engineering faculty and visiting the numerous structural engineering research labs and facilities in the department.

Shortly before lunch, Mr. Hooper gave a lecture entitled "Seahawk Stadium Design" to a senior-level structural steel design course. The presentation highlighted the unique challenges faced in the design of the new football stadium in Seattle, including the unique challenges of the site which supported the former Kingdome facility. Most importantly, the talk gave the undergraduate students a chance to see consulting engineering in practice and also gave them an opportunity to have an open discussion with a member of one of the top engineering consulting companies in the United States.

For lunch, Mr. Hooper sat down with the entire EERI student chapter membership for an informal gathering. During this time, the students discussed with him the major activities of the Notre Dame chapter of EERI, particularly in the areas of community outreach programs, and had an opportunity to learn more about John's personal experiences, both academic and personal. In addition Mr. Hooper had the opportunity to learn more about the individuals that make up the membership of the EERI@UND student chapter.

Later that afternoon, Mr. Hooper delivered a lecture entitled "Engineering Design For Disaster" to Notre Dame undergraduate and graduate students, post-doctoral researchers, faculty, and other interested parties. The talk discussed that how in the wake of 9-11, the issues regarding engineering design for disasters, whether natural or man-made, have come to the forefront of society. The presentation highlighted the performance objectives for the natural and man-made disasters that can affect building structure performance and safety. The lecture proved to be extremely informative, thorough, and interesting given the fact that 9-11 is still fresh in the minds of many. Immediately following the late afternoon talk, there was a small reception held for Mr. Hooper. Later that evening, John had an opportunity to meet with the entire structural engineering faculty for a nice dinner.

The following day, John spent a sunny, but cold fall Saturday afternoon enjoying the tradition of Notre Dame Football with EERI@UND chapter president, Brian Morgen and witnessed the demolishing of Rutgers University 42 to 0. The following morning Mr. Hooper departed South Bend for Seattle.

In addition to this summary, a summary of John Hooper's visit is available on our chapter website. [www.nd.edu/~eeriund].

ITINERARY
John Hooper, SE
Skilling Ward Magnusson Barkshire - Seattle, WA

Thursday, November 21, 2002

6:35 p.m. Arriving in South Bend Regional Airport – United Express Flight #5866
Transportation provided by Brian Morgen (EERI President) to Best Western Inn
& Suites, 5640 N. Main St., Mishawaka, Indiana (Confirmation #86181)

Friday, November 22, 2002

8:45 a.m. Meet Brian Morgen and Brad Weldon (EERI VP) in the lobby of the Best
Western for transportation to breakfast near campus (Original Pancake House)

9:45 a.m. Transportation to the Notre Dame campus

10:00 a.m. Dr. Yahya Kurama - [164 Fitzpatrick Hall]

10:30 a.m. Tour of Highbay Structural Testing Facility with Brian Morgen & Brad Weldon –
[101 Fitzpatrick Hall]

11:00 a.m. Dr. David Kirkner - [162 Fitzpatrick Hall]

11:30 a.m. Prep time for guest lecture, Devin Brown to assist with computer setup

11:45 a.m. 11:45 am to 12:30 pm - CE 466 (Structural Steel Design) guest lecture entitled
"Seahawk Stadium Design", CE/GEOS Conference Rm. - [156D Fitzpatrick Hall]

12:30 p.m. Lunch with EERI@UND student chapter members, CE/GEOS Conference Room -
[156D Fitzpatrick Hall]

1:30 p.m. Dr. Peter Burns, Chair of Department – [156A Fitzpatrick Hall]

2:00 p.m. Dr. Lynn Salvati - [168 Fitzpatrick Hall]

2:30 p.m. Dr. Edgar Black – [158 Fitzpatrick Hall]

3:00 p.m. Tour of NatHaz Laboratory with Tracy Correa & Tiphaine Williams

3:30 p.m. Free Time to prepare for seminar, Hua Jiang to assist with computer setup

4:00 p.m. Seminar entitled "Engineering Design for Disaster" – [214 Debartelo Hall]

5:00 p.m. Post-seminar refreshments in CE/GEOS Conference Room – [156D Fitzpatrick]
Transportation back to Best Western provided by Devin Brown

7:00 p.m. Meet Dr. Yahya Kurama in the lobby of the Best Western - Transportation
provided to & from the Tippecanoe Place by Dr. Kurama.

7:30 p.m. Dinner at Tippecanoe Place with Dr. Yahya Kurama, Dr. David Kirkner, and Dr.
Lynn Salvati

Saturday, November 23, 2002

10:00 a.m. Meet Brian Morgen in the lobby of the Best Western for transportation to
University of Notre Dame campus

10:15 a.m. Notre Dame campus tour with Brian Morgen

1:00 p.m. Attend Notre Dame vs. Rutgers Football game with Brian Morgen
Transportation back to Best Western provided by Brian Morgen

Sunday, November 24, 2002

6:35 a.m. Departure from South Bend Regional Airport – Transportation to airport
provided via taxi from hotel to airport - John Hooper to make arrangements for
taxi at hotel front desk



The Notre Dame Student Chapter of the Earthquake Engineering Research Institute and Department of Civil Engineering and Geological Sciences proudly present:

Seahawk Stadium Design

A seminar by John Hooper, S.E.

Skilling Ward Magnusson Barkshire Inc.
Seattle, Washington

Presented to CE466 – Structural Steel Design

Friday, November 22, 2002 at 11:45 am
156D Fitzpatrick Hall of Engineering

ABSTRACT

The design of the new Seattle Seahawks Stadium was completed in July 2002. The Seahawks Stadium, completed alongside the adjacent Seattle Mariners' Safeco Field, create the largest professional sports complex in the country.

The new Seahawks Stadium is comprised of the following:

- The smallest plan footprint for any 70,000+ seat stadium in the NFL
- The largest upper deck cantilever in the NFL (56 feet)
- The longest one-way roof span in the country

This presentation will highlight the unique challenges faced in the design of the new stadium, including the unique challenges of the site (which supported the former Kingdome!), the earthquake hazards at the site, the long roof spans, and the desire for an “intimate” experience at a large NFL venue. The challenges required unique solutions in order to accomplish the goals for the stadium. These solutions will be the focus of the presentation.



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Engineering Design for Disasters

A seminar by John Hooper, S.E.

Skilling Ward Magnusson Barkshire Inc.
Seattle, Washington

Friday, November 22, 2002 at 4:00 pm
214 Debartelo Hall

ABSTRACT

In the wake of the tragedy of 9-11, the issues regarding engineering design for disasters, whether natural or man-made, has come more to the forefront of society. The average citizen generally has little knowledge regarding the anticipated performance of building structures in the event of high winds, tornadoes, earthquakes, or bomb blasts. In reality, not every building design professional, including engineers, architects and contractors, are aware of the performance targets that are assumed in the requisite codes and standards.

This presentation will highlight the performance objectives for the natural and man-made disasters that can affect a building structure, including the following:

- High winds, hurricanes and tornadoes
- Floods and tsunamis
- Earthquakes
- Terrorist acts

Specific methods of designing for earthquake demands will be presented and will include a detailed description of anticipated building performance. A brief design example will also be presented. A discussion regarding man-made disasters and the associated anticipated performance will be presented along with new methods for safe-guarding the public in the event of a bomb blast.

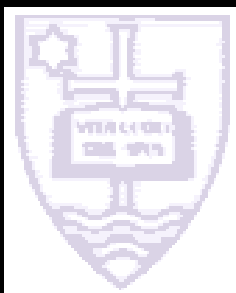


EARTHQUAKE ENGINEERING RESEARCH INSTITUTE

at the University of Notre Dame



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