



DANSK VANDBYGNINGSTEKNISK SELSKAB

DANISH SOCIETY OF HYDRAULIC ENGINEERING

v/ H. F. Burcharth, AUC, Sohngårdsholmsvej 57, 9000 Aalborg. Tlf. 08 - 142333

Titel	Helge Gravesen		
ind	20 NOV. 1990		
CC			
File	VBS		

To proposed speakers at Seminars on Design of Exposed Bridge Piers

On behalf of Danish Society of Hydraulic Engineering I hereby offer you the opportunity of reading a paper describing the experiences obtained during the bridge pier investigations for the West Bridge aiming at concluding how future exposed bridge piers should be designed.

The paper should afterwards be printed in a proceeding of the seminars.

We hope you find our proposal interesting although our society only may offer to cover you direct expenses (travel + hotel).

The language is proposed to be english to allow participation of our foreign colleagues of the Storebælt projects.

The first seminar 1, Dynamic ice load is proposed held tuesday 22 January 1991 13.00 to 21.00 hrs at Technical University of Denmark room 1 building 101.

The second seminar 2, Scour, waves and Ship Impact is proposed held tuesday 12 March 13.00 to 21.00 hrs at Technical University of Denmark room 1 building 101.

Each lecture will cover approximately 35 minutes. Please revert as quick as possible with a preliminary acceptance and inform me if you want changes in the proposed title of the paper.

Best regards

Helge Gravesen

secretary of Danish Society of Hydraulic Engineering

c/o Dansk Geoteknik as

Granskoven 6, 2600 Glostrup

Tel. 42 45 99 99

P.S. Members of Danish Geotechnical Society

Danish Society of Structural Engineering and

Danish Society of Risk Analysis will be invited to participate in the seminars.



DANSK VANDBYGNINGSTEKNISK SELSKAB

DANISH SOCIETY OF HYDRAULIC ENGINEERING

v/ H. F. Burcharth, AUC, Sohngårdsholmsvej 57, 9000 Aalborg. Tlf. 08 - 142333

Draft Programme

16.11.1990

Seminar on Design of Exposed Bridge Piers

1. Dynamic Ice Load

Tuesday 22 January 1991 at 13.00 to 21.00 hrs at Technical University of Denmark, room 1, building 101.

Programme

1. Introduction, load cases, damage criterion
by Helge Gravesen, Dansk Geoteknik (Carl Bro Group) (CCL joint venture)
2. Extreme ice strength and thickness
by F. Thunbo Christensen, Danish Hydraulic Institute
3. Structured system, non linearities
by Helge Gravesen, Dansk Geoteknik
4. Dynamic soil Tests
by Knut Andersen, Norwegian Geotechnical Institute
5. Cyclic and plastic deformations, stiffness and hysteretic damping of
central ice load exposed pier
by Knut Andersen
6. Bearing capacity of ice exposed pier. Effect of torsion. Comparison
between conventional and advanced design
by P. Sandgård Kristensen, Cowiconsult
7. Ice load tests, results
by F. Thunbo Christensen
8. Interpretation of ice load tests. Non linear structural modelling
by N.-E. Ottesen Hansen, LIC Engineering
9. Conclusions. What have we learned
by Helge Gravesen



DANSK VANDBYGNINGSTEKNISK SELSKAB

DANISH SOCIETY OF HYDRAULIC ENGINEERING

v/ H. F. Burcharth, AUC, Sohngårdsholmsvej 57, 9000 Aalborg. Tlf. 08 - 142333

Draft programme

16.11.1990

Seminar on Design of Exposed Bridge Piers

2. Scour, Waves and Ship Impact

Tuesday 12 March 1991 at 13.00 to 21.00 hrs at Technical University of Denmark, room 1, building 101.

1. Introduction
by Helge Gravesen, Dansk Geoteknik (Carl Bro Group) (CCL joint venture)
2. Scouring of bridge piers in waves and current
by Jørgen Fredsøe, ISVA
3. Results of scourmodel tests with West Bridge piers
by Mogens Hebsgaard or Ole Juul Jensen, Danish Hydraulic Institute
4. Improved methods for determination of design waves and a bit on the 1872 storm
by Morten Rugbjerg, Danish Hydraulic Institute
5. Wave and current forces on bridge piers. Determination by simple principles and computer models
by Helge Lundgren, ISVA
6. Risk of ship impact and selected design events for ship impact to West Bridge
by Jørgen Kampmann, Cowiconsult
7. Soil strength and bearing capacity for ship impact
by P. Sandgård Kristensen, Cowiconsult
8. Results of modelling of ship impact on bridge piers and on bridge girders
by Helge Gravesen and Michael Bindseil, Carl Bro Group