

MINUTES OF A TECHNICAL COMMITTEE MEETING

Date: Thursday 30th March 2017

Time: 10:00am

Location: Hamilton House, Mabledon Place, London, WC1H 9BD

PRESENT:

Chris Barker	Arup
Daniel Harvey	Atkins
David Hard	Bachy Solentache
Graham Thompson	Bachy Solentache
Emily Wood	BAM Ritchies
James Binns	Byland
Zoe Baldwin	Cementation Skanska
Andrew Bell	Cementation Skanska
Sebastian Draghici	Central Piling
Steve Hadley	Central Piling
Martyn Ellis	ESG
Toby Hayward	Expanded
Jon Chaloner	Franki Foundations
Alasdair Landels	Franki Foundations
Ebenezer Adenmosun	Geofirma Ltd
David Roy	Keltbray Piling
Claudio Angelino	Murphy Ground Engineering
Kieran Herbert	Murphy Ground Engineering
David Illingworth	Pile Designs
Chris Oram	Roger Bullivant
Colin Ryan	Simplex Westpile
Iwan Jones	TestConsult

In the Chair: Mark Pennington BBGE

In Attendance: Andrew Bond Chairman of Eurocode 7
Ciaran Jennings FPS Secretary
Katie Kennedy FPS Secretariat

No	TOPIC	ACTION
1	APOLOGIES FOR ABSENCE	
	Apologies had been received from Steve Wade (Cementation Skanska), Chris Irvin (DYWIDAG), Derek Egan (Remedy Geotechnics) and Kayvan Kiany (Rock & Alluvium).	
2	MINUTES OF THE LAST MEETING	
	The minutes of the meeting held on 24 th November 2016 were approved.	
3	MATTERS ARISING	
	There were no matters arising.	
4	CURRENT AND FUTURE PFA/GGBS SUPPLY IN THE UK	
	Ciaran Jennings reported that he had spoken to Chris Harnan to see if the EFFC Concrete Group are aware of this issue; the EFFC Concrete Group are testing a variety of concrete mixes and getting good results. The EFFC Concrete Group are aware of the issue and the EFFC Tremie Guide will take the issue into account.	

	<p>Andrew Bell stated Cementation Skanska are having on-going discussions with UK suppliers.</p> <p>David Hard noted an EFFC Survey had been circulated in 2016; 3 responses were received from FPS, which are being incorporated.</p> <p>The EFFC guidance relates to wet concrete testing being carried out in the laboratory and on site. The Committee were reminded to submit any further comments. The next meeting of the Concrete Task Group is taking place at the end of April 2017.</p> <p>Andrew Bond commented that the testing and reliability of concrete is important at CEN level. He explained there is a penalty applied to bored piles without casings in Eurocode 2, which he is trying to get removed or have moved across to Eurocode 7.</p>	<p>ALL</p>
5 FEEDBACK FROM QUARTERLY COMMITTEE		
	<p>At the last Committee meeting, it was reported that the Quarterly Committee have asked for each Committee to create terms of reference. A Survey was circulated to Committee members and the responses have been used to create the terms of reference for the Technical Committee.</p> <p>Mark Pennington presented FPS Technical Committee Terms of Reference:</p> <ul style="list-style-type: none"> • Provide technical guidance to the FPS Members and Associate Members to drive technical improvements and consistency by: <ul style="list-style-type: none"> ○ Providing technical input to notes on safety issues / initiatives ○ Producing guidance notes on specific technical issues ○ Producing guidance on the use of codes of practice ○ Defining standard level of technical information required at various project stages. • Provide input to the review of codes of practice and industry standard documents • Provide technical training opportunities to encourage more people into the industry and FPS • Work via Associate members and contacts with Clients to raise design issues at an early stage. • Work closely with the other committees to ensure consistent FPS approach <p>Mark Pennington welcomed feedback from the Committee members regarding the current meetings, whether more meetings are required due to high turnout and how the meeting should be run. Any suggestions will be discussed by the Executive Committee.</p> <p>It was agreed the Terms of Reference will be uploaded to the FPS website as a reminder to the Committee.</p>	<p>ALL</p> <p>FPS Secretariat</p>
6 LOAD CASES		
	<p>James Binns explained Chris Barker and Dimitrios Selemetas are working on a paper that will provide guidance on providing load cases for piling. The paper will recommend FPS E-Pile Schedule.</p> <p>It was requested the first draft of the paper be distributed before the next FPS Technical Meeting on 7th June 2017.</p> <p>Ebenezer Adenmosun asked whether there is a plan to educate structural engineers on load cases. Mark Pennington noted that the document is currently in draft form and there have currently been no discussions about holding workshops.</p> <p>Andrew Bond suggested contacting the Institute of Structural Engineers regarding the</p>	<p>C Barker, D Selemetas, FPS Secretariat</p>

	<p>meetings they hold, as ISE hold a seminar on the ground and are usually looking for presentations. This was felt to be a good idea once the paper had been produced.</p> <p>The Committee discussed structural engineering Software packages and how their providers can be influenced to include the FPS E-pile Schedule. One suggestion was a survey aimed at main consulting engineers to ask whether their software could be modified to include FPS E Pile Schedule. The Secretary agreed to consider how a survey of structural engineers may be conducted to identify the commonly used packages.</p> <p>Chris Oram noted that engineers need to be informed at an academic level.</p>	FPS Secretary
7	CRITERIA FOR UPLIFT (TENSION) IN PILES SPECIFIED IN THE EUROCODE	
	This item to be removed from future agendas.	
8	SONIC TESTING vs TIP TESTING	
a)	<p>FPS 'Integrity Testing' Working Group</p> <p>Andrew Bell reported a small working group has been set up, which includes FPS associate members. The first meeting was held recently and the group discussed Sonic Testing and TIP Testing. The FPS Guidance Document will include positives and negatives of different testing methods. The group are looking to update old guidance notes and add further detail. The Chairman reminded the group that this had been initiated by a safety concern around the number of hand injuries that were occurring when installing sonic tubes.</p> <p>Graham Thompson asked if a statement could be included in the guidance document regarding smaller piles.</p> <p>Andrew Bond noted the FPS guidance note on integrity testing would be useful for the revision of Eurocode 7. He explained the project team of Eurocode 7 would be able to incorporate the FPS guidance note into the revision of Eurocode 7 as it would be an industry standard document. This would help to incorporate its requirements into the standards. Ciaran Jennings commented that the EFFC are interested in the guidance document as well. Andrew indicated that European acceptance of the document would make it easier to incorporate into EC7.</p> <p>It was agreed a draft would be circulated before the next meeting and the FPS guidance note would be published by the end of the year. It was noted the EFFC could endorse the document.</p>	A Bell
9	DESIGN OF BORED PILES INTO CHALK	
a)	<p>Engineering in Chalk</p> <p>Information about Engineering in Chalk 2018 was circulated before the meeting. Ciaran Jennings explained that he had spoken to Sabine Darson at Soletanche Bachy. She had confirmed that Soletanche Bachy have data on piling in chalk. It was noted the FPS have little testing in chalk data to contribute as failed tests are not common and testing houses often do not necessarily have a means of identifying failed pile tests in chalk within their own data.</p> <p>In discussion it was agreed that the call for data should widen out to cover all chalk results. Ideally this should identify the six different types of chalk. It was agreed that all would review their testing data and establish what data they have for chalk. Andrew Bond commented that developing a database of these results would be very helpful in developing the Eurocodes as typically the French would have a large database to support their methodology.</p>	All

b)	<p>Addressing the issues of economy of using PR11 / C574 over PG6</p> <p>Chris Oram explained he has made no further progress on the document he was working on. It was noted a paper from Keith Miller had been circulated at the last Committee meeting.</p>	
10	<p>SPERWall</p>	
	<p>Ciaran Jennings reported that SPERWall has been published but he has not seen a copy.</p> <p>Andrew Bell noted that the electronic version of SPERWall is poor, as there is no side index, no list of authors or a front sheet. He has made a complaint, but had received no response. [Post meeting note, these elements can be downloaded separately, however the publisher is looking at how to integrate them.]</p> <p>Toby Hayward asked whether a workshop will be held to explain the changes between the 2nd and 3rd edition of SPERWall. It was noted that a workshop may be held by Jim de Waele regarding the changes in SPERWall, although this was not public knowledge.</p>	
11	<p>PRE-AUGERING OF LARGE CASINGS</p>	
	<p>Ciaran Jennings noted the document had been amended to include the change relating to the ground water level discussed at the last Committee meeting.</p>	
12	<p>DESIGN PRACTICES FOR SELF-DRILLING ANCHORS</p>	
	<p>Chris Oram explained he is waiting for comments from Derek Egan on the technical note.</p>	
13	<p>UPDATE OF DOCUMENTS</p>	
a)	<p>C580/C760</p> <p>It was noted that C580/C760 was published in February 2017.</p>	
b)	<p>Temporary Works Forum</p> <p>Ciaran Jennings reported there has been no further progress.</p>	
14	<p>EUROCODES AND EXECUTION CODES</p>	
a)	<p>Revision of Eurocode 7</p> <p>Andrew Bond, the chairman of Eurocode 7, gave a presentation to the Technical Committee on the evolution of EC 7. It was noted that all Eurocodes are being revised and updated. Eurocode 7 is being revised between 2010-2020. The 1st draft of Phase 1 is to be delivered in April/May 2017 and the final draft will be delivered in October 2017. The revision of Eurocode 7 will be published between 2020-2022. Phase 2 of revising the Eurocode 7 will begin in May 2017. Phase 3 and 4 will start in March 2018, this will be the enquiry stage for public comment.</p> <p>There will be 3 parts to Eurocode 7:</p> <ol style="list-style-type: none"> 1. General rules 2. Ground Investigation 3. Geotechnical Structures <p>He explained that there was a desire to get rid of the National Annexes by incorporating them within the EC in order to stop their being a proliferation of them.</p> <p>There are 6 tasks in response to M/515. The tasks most relevant to the FPS Technical Committee are task 4 which is foundation, slope and ground improvement and task 5 which is retaining structures, anchors and reinforced soil. Andrew Bond explained the</p>	

	<p>individual project team tasks involved for each 6 tasks. Around 200 people are involved in the revision of Eurocode 7.</p> <p>To view Andrew's presentation; please click here.</p> <p>Andrew answered a question from Ebenezer Adenmosun regarding geotechnical estimation; Andrew explained the Eurocode check is required as a minimum that is acceptable for safety.</p> <p>Mark Pennington asked whether input from the FPS is required for the revision of Eurocode 7. Andrew Bond explained that there may be a request for participants for potential support of task 5.3 retaining structures. It was noted all roles are self-funded.</p> <p>Andrew Bond said that he may not be able to continue as the Chairman of EC7 owing to the cut in his funding from NEN. He explained this would mean that the UK was less able to exert influence as a Dutch civil engineer would need to take over the role.</p> <p>Andrew Bond was thanked for giving the presentation by the Technical Committee Members.</p> <p>b) BS8004 Appendix A A Helical Pile Position Paper had been drafted before the last meeting. Chris Oram explained that he had received comments from Chris Barker and has revised the document to include the comments. Although it was noted that further comments would be useful. Chris Oram to finalise the position paper.</p> <p>c) Update of Codes FPS Secretariat to ask Derek Egan for the update of codes table; which will be circulated to the Committee.</p> <p>d) Eurocode 2 Structural Capacity A paper from James Binns was circulated before the meeting, which explained that previously it was generally understood that the verification of the Eurocode structural capacity of piles was in accordance with Section 3 of Eurocode 2. However, this is only applicable to reinforced concrete and different rules apply to plain or lightly reinforced concrete structures / piles.</p> <p>The FPS position paper on the design of piles to Eurocodes does not align with Eurocode and there is some conflict. It was agreed that this is something FPS members should be aware of.</p> <p>David Roy agreed to review and amend the FPS position paper on the design of piles to Eurocodes to clarify, Ebenezer Adenmosun also offered to help if required.</p>	<p>C Oram</p> <p>FPS Secretariat</p> <p>D Roy</p>
15	BUILDING INFORMATION MODELLING	
	<p>Mark Pennington noted the BIM working group is currently dormant.</p> <p>a) Developing AGS Data Format to Capture Piling as Built Information Chris Barker explained there was an AGS Data Format meeting that took place in December 2016. Owen Francis was unable to attend. Neil Chadwick is working on the AGS Data Format for piling, which is 90% complete for initial discussion.</p> <p>Mark Pennington invited Neil Chadwick to the next FPS Technical Meeting on 7th June 2017 to discuss the AGS Data Format.</p>	
16	MSc STUDENT PRIZE	
	<p>Ciaran Jennings explained four student applications have been identified and the FPS are currently checking the references from their universities to ensure they are credible applicants. Once the references for the applicants have been received, the successful</p>	

	applicants will receive a 3 month project placement from an FPS member, they will attend the FPS Annual Dinner and receive £5,000 grant towards their studies.	
18	SOCIAL EVENTS	
	FPS Summer Ball and Members Tournament will be taking place on Saturday 24 th June 2017 at Coombe Abbey in Warwickshire.	
19	ANY OTHER BUSINESS	
	Chris Oram asked whether the LDSA London Clay guidance is in line with Eurocode and it is due for review. It was suggested that he contact Chris Barker with this question.	
20	DATE OF NEXT MEETINGS	
	<ul style="list-style-type: none"> • Wednesday 7th June 2017 • Wednesday 6th September 2017 • Tuesday 7th November 2017 <p>All meetings are to start at 10am and will be held at Hamilton House, Mabledon Place, London, WC1H 9BD</p>	