

## MINUTES OF A TECHNICAL COMMITTEE MEETING

**Date:** Thursday 24<sup>th</sup> May 2018

**Time:** 10:00am

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

**PRESENT:**

Ash Rogers	Aarsleff Ground Engineering
Chris Barker	Arup
Andre Sampaio	A-Squared Studio
Daniel Harvey	Atkins
David Hard	Bachy Soletanche
Graham Thompson	Bachy Soletanche
Owen Francis	BAM Ritchies
Richard Ball	Card Geotechnics Ltd
Andrew Bell	Cementation Skanska
Toby Hayward	Expanded
Jon Chaloner	Franki Foundations
Ebenezer Adenmosun	Geofirma Ltd
Chris Beynon	JRL Civil Engineering
Richard Harper	Keltbray Piling
James Blackwell	Martello Piling
James Hayward	Pile Designs
David Illingworth	Pile Designs
Jack Clayton	Rock & Alluvium
Chris Oram	Roger Bullivant Ltd
Martyn Ellis	Socotec UK
Simon Shaw	Van Elle
Colin Ryan	Westpile

**In the Chair:** Mark Pennington BBGE

**In Attendance:** Ciaran Jennings FPS Secretary  
Grace Hawkins FPS Secretariat

No	TOPIC	ACTION
1	<b>APOLOGIES FOR ABSENCE</b>	
	Apologies had been received from James Binns (Byland Engineering), Chris Irwin (DSI), Iwan Jones (James Fisher Testing Services Limited), Keith Miller (Expanded), Chris Fox (Murphy Ground Engineering), Darren Milo (Murphy Ground Engineering).	
2	<b>MINUTES OF THE LAST MEETING</b>	
	The minutes of the meeting held on the 15 <sup>th</sup> March 2018 were approved.  Mark Pennington advised the recent new format of the Technical meetings includes a presentation, it was suggested to have Chris Raison attend to present on the revision of EN 1997-3 Clause 6 – Pile Design, however he had to cancel due to attending a funeral.	
3	<b>MATTERS ARISING</b>	
a)	<b>LDSA Guidance Note – FPS response</b>  Mark Pennington reported that at the last meeting Stuart Pennington and Dinesh Patel presented the updates to the LDSA (London District Surveyors Association) guidance for the design of straight shafted bored piles in London clay.  Mark explained that the document should be reviewed by the Technical Committee for it to receive formal backing from the FPS. He asked the Committee to provide comments	

	<p>on the document for consideration by Arup as input was currently from Mark Pennington and Stuart Norman only. It was added the FPS Quarterly Committee are keen for Technical to input their comments.</p> <p>Chris Barker reminded the Committee it is not within Stuart or Dinesh's remit to agree to a revision, but they will forward any comments to the LDSA to consider the Technical Committee's recommendation.</p> <p>It was reported since the last meeting David Hard and Derek Egan have sent in comments, which were presented and discussed by the Technical Committee.</p> <p>Martyn Ellis advised following the presentation at the last meeting his colleagues contacted the BDA, they explained John Grainger has been in touch with Dinesh Patel. To view John Grainger's piece in the May 2018 edition of GeoDrilling International <a href="#">click here</a> he writes how ground investigation procurement is a broken process that can currently increase risk. It explains a detail discussion with clients is required at an early stage.</p> <p>Ciaran Jennings reported that following the Carillion and Grenfell events, Mark Castle of Build UK is keen to address issues in the supply chain. Specifically the lack of respect for quality in the industry and the trend towards the lowest cost. It is possibly an area the FPS can collaborate on with the AGS and the BDA. Rather than cutting costs at the beginning, a good design will be more cost effective.</p> <p>Mark agreed to directly respond to Dinesh Patel and Stuart Pennington to consider a revision. The Committee agreed to directly respond, write a specific note and to refer to the LDSA in the ground investigation standards working group. Mark will draft a response incorporating David Hard and Derek Egan's comments and circulate to the Technical Committee.</p>	<p><b>M Pennington</b></p> <p><b>M Pennington</b></p>
<p><b>b)</b></p>	<p><b>Guidance on Minimum SI requirements</b></p> <p>Mark Pennington reported that following the presentation at the last meeting the Technical Committee agreed a key focus for 2018 should be developing a 'Minimum Standard for Site Investigation for piling'. Derek Egan offered to lead this.</p> <p>It was noted Derek Egan has drafted a remit for the GI working group; to review guidance and to re-run a survey to get clear opinion on quality of site investigation.</p> <p>Derek advised the survey was previously produced in 2008 and the results were published in Geotechnical Engineering. He added there should be parallel questions to the previous survey.</p> <p>Chris asked what should be done to drive improvement if the survey results indicate higher than the previous results or as the same. The previous result was indicated that 30% of SI's were giving inadequate information, if the new survey shows a drop to 25% it has improved and is unlikely to result in action from developers. He felt that a 50% figure would be necessary for the quality issues to be taken seriously.</p> <p>David Illingworth asked what is classed as inadequate site investigation. Chris stated the previous survey highlighted that the housing sector was a culprit. He felt it would be useful to understand the ground conditions, areas, industry sectors etc. Andy Bell also requested that the survey capture whether the SI was client or contractor designed.</p> <p>It was agreed publications that Construction News should be approached as well as GE magazine in order to push the results and conclusions.</p>	

	<p>Martyn Ellis asked over the last ten years do piling contractors design more piles, Mark advised over the last ten years he has not seen a change. Martyn added the comparison between the last ten years should be different.</p> <p>The following Committee members have volunteered to be a part of a ground investigation working group; Derek Egan, James Hayward, David Illingworth, Chris Barker and David Hard.</p> <p>It was noted Rob West from Cementation and Jamie McEwan from BBGE may be interested in being a part of the group.</p> <p>Owen Francis suggested someone in the group should carry out site investigation; David Hard advised he has contacts. Ciaran Jennings suggested a representative from the AGS could be involved. Owen will nominate someone from ground investigation to join.</p> <p>Chris stated a concise timeline of 12-18 months is required. He asked should the FPS revise the document with a summary of what the minimum requirements are, Ciaran advised the FPS Executive has confirmed this is required.</p> <p>It was noted the FPS aim to take set out what contractors need in order to carry out and install the piles correctly, rather than trying to update the Eurocodes and standards.</p> <p>Ebenezer Adenmosun asked who it will go to, Ciaran stated his expectation is it will have wide promotion especially in the ground investigation industry. It should be sent to the AGS, BDA and Build UK.</p> <p>It was also advised Debbie Darling is the PR consultant for the FPS and can push this towards publications. Mark noted Debbie should be asked to do the PR for the e-pile schedule.</p> <p>Chris reported he met with Canary Wharf contractors who confirmed they would do the piles in compliance with the FPS.</p>	<p><b>O Francis</b></p>
<p><b>c)</b></p>	<p><b>FPS Guide to Deep Piles in London</b></p> <p>Mark Pennington reminded the Committee that following the LDSA Guidance Note presentation it was agreed Deep piles in London or UK should be looked at; it was commented this would be good as many Members will be piling into Thanet sands and chalk and there are more, deeper piles being installed.</p> <p>Mark and Andrew Bell agreed to look at this; He asked the group should the FPS be pushing this and getting involved. Andrew replied if the FPS decides not action this, it will continue to be done at company level, the information will be there but will not be consistent.</p> <p>It was suggested a working group is put together; Mark advised it will be similar to the LDSA; David Illingworth thought the FPS should be pushing better pile tests. Andy Bell agreed that more data is needed to create a usable document.</p> <p>Chris Barker asked why the guidance document was needed. The Chair explained that that the LDSA document was being applied inappropriately at the moment to piling schemes that sit outside of its domain.</p> <p>Toby Hayward suggested LDSA should lead this; Andrew agreed and stated statistics should be collated to support the case. Members to be asked to report how many numbers they do and put the statistics towards the LDSA.</p> <p>Ciaran Jennings agreed the FPS Secretariat will collect the data in the same way the Quarterly Order statistics. Mark suggested the number of piles in dry London clay and</p>	<p><b>M Pennington A Bell</b></p> <p><b>FPS Secretariat</b></p>

	<p>piles found below London clay projects in the last 24 months should be collected from Members and Associate members of the Technical Committee before the end of August. It was agreed the information provided should include project name and whether it is CFA or Rotary.</p>	<b>All</b>
<b>d)</b>	<p><b>Load Cases guidance document</b></p> <p>Mark Pennington reported the e-pile schedule has had no further comments received since the last meeting, it will be circulated to the FPS Executive.</p> <p>Chris Oram advised he had a comment in relation to the SLS values, Chris Barker confirmed this was raised at previous meeting and has been addressed. The SLS equation is in the combination tab and is referred to in the note C4A and C4B.</p> <p>Chris Barker added the table is set up to add more columns if required.</p> <p>Mark advised when the Executive has ratified the e-pile schedule, the Technical Committee will need to get it into structural and architectural publications. Chris Barker reported he spoke to IStuctE (Institution of Structural Engineers) and has been given a contact with who he can discuss how to get it into the publications, Chris asked if a presentation could be given. This could also be provided to the ICE.</p> <p>Mark added it needs to highlight using the e-pile schedule as a data capture to feed into digital data flows on digital construction projects. Andrew Bell stated commercially the FPS should look at benefit and costs, and what happens if data is not in that format.</p> <p>Ebenezer Adenmosun added it would be good to be able to send it to clients; Ciaran Jennings confirmed the FPS Executive is taking place on the 5<sup>th</sup> July, however he agreed to ask if the Technical Committee can begin publicising this and circulating to clients.</p> <p>Chris Barker agreed to put together a presentation with Andy Bell and James Bins and the FPS Secretariat agreed to send across a presentation template.</p>	<p><b>FPS Secretariat</b></p> <p><b>C Jennings</b></p> <p><b>C Barker FPS Secretariat A Bell, J Bins</b></p>
<b>e)</b>	<p><b>Sonic Testing vs TIP Testing</b></p> <p>Ciaran Jennings reported that the document was being reviewed by the Safety &amp; Training Committee to see if they could add anything about safer methods of sonic logging, however it was noted they are happy with the document.</p> <p>As part of a project on automation of manual handling, they want to establish what can realistically be automated or performed differently.</p> <p>Ciaran advised the document is ready to be published.</p>	<b>FPS Secretariat</b>
<b>4</b>	<b>EUROCODES AND EXECUTION CODES</b>	
<b>a)</b>	<p><b>Revision of Eurocode 7</b></p> <p>Mark Pennington advised there was going to be a presentation on the revision of EN 1997-3 Clause 6 – Pile Design by Chris Raison.</p> <p>It was reported there have been updates and commentary which has various different parts. The FPS are being asked to provide input to the revision of EN 1997-3 Clause 6 – Pile Design; previously the FPS inputted to part 1 by convening at Arup. Mark requested volunteers with a good working knowledge to EN1997 to input into this revision.</p> <p>It was noted the redraft of the pile design part has not yet started, the FPS can input into it. Mark advised Chris Raison will present on the current discussion and approach.</p>	

	<p>The following Committee members volunteered; Ebenezer Adenmosun, Andrew Bell, Chris Oram, Jon Ball, James Hayward, David Illingworth, Toby Hayward, Chris Beynon and Ash Rogers. Chris Barker advised he will nominate someone from Arup to join.</p> <p>It was requested the meeting takes place in early July before the school holidays.</p> <p>David Hard reported project team 4 are writing part three with the working group feeding into this. They are looking at execution techniques creating a conflict with TC28 which David sits on this representing the UK. He added at some point the execution codes will need to be re-written as part of the rewrite of EC7.</p> <p>The EFFC Technical committee are keen for what goes into EC7 to reflect the industry; they need a European view to feedback to TC250.</p> <p>Chris Barker added Andrew Bond advised having a response from an organisation rather than an individual is more impactful.</p> <p><b>b) Update of Codes</b> David Hard reported that Jet grouting and grouting are coming out for comment, he advised he will forward these to the FPS Secretariat to circulate to the Technical Committee.</p> <p><b>c) Eurocode 2 Structural Capacity</b> Richard Harper sent a review of EC2 to Mark Pennington ahead of the meeting, the FPS Secretariat agreed to circulate the document.</p> <p><b>d) Tower Crane Loadings &amp; CIRIA C654</b> Mark Pennington advised he was going to raise this at the last CIRIA meeting, however was unable to attend. Andrew Bell agreed to check if it was discussed.</p>	<p><b>C Barker</b></p> <p><b>D Hard FPS Secretariat</b></p> <p><b>FPS Secretariat</b></p> <p><b>A Bell</b></p>
<b>5</b>	<b>BUILDING INFORMATION MODELLING</b>	
<b>a)</b>	<p><b>AGS/FPS Data Information Transfer for Piling</b></p> <p>Previously Neil Chadwick presented the AGS/FPS Data Information Transfer for Piling to the group, it was recognised as a good way forward, however there is difficulty getting funding and progressing; it was noted the scope is too big for the Technical Committee to lead, but they will input.</p> <p>Mark Pennington advised HS2 have shown a significant interest, he added HS2 could provide funding.</p> <p>There has been wider discussion of how to improve the flow of data with HS2 support.</p> <p>Mark reported he had a meeting with Jim De Waele to share their methods and looking at the possibility of putting piling data into AGS Data format. Jim advised he uses data in a Share-point environment transferring directly into a client's BIM model. It was agreed to meet with HS2 together to establish what support HS2 are willing to provide. He noted the key is trying to develop use of format.</p> <p>Chris Barker commented the pile loading was quite elementary and sits well with the e-pile schedule, he suggested the FPS present this to the HS2. Mark agreed, advising it has been discussed with HS2.</p> <p>Mark stated when feedback is received from HS2, he will advise Neil Chadwick.</p> <p>Chris advised HS2 are having wider discussions with tier one contractors, Owen Francis added they are also looking at grouting information.</p>	<p><b>M Pennington</b></p>
<b>b)</b>	<p><b>HS2 Funding</b></p> <p>This item was discussed under item 5a above.</p>	

<b>6</b>	<b>FPS WEBSITE</b>	
	<p>Ciaran Jennings reported he is in process of pulling together documents which are external and internal facing, he will go through the archive and create a list of documents for the Committee to establish what needs updating or reviewing.</p>	<b>C Jennings All</b>
<b>7</b>	<b>RIG BEARING PRESSURE SPREADSHEETS</b>	
	<p>The FPS Secretariat reported that Derek Egan has offered two dates for further Rig Bearing Pressure Spreadsheet training workshops; 19<sup>th</sup> September in Derby and 11<sup>th</sup> December in London.</p> <p>Derek will explain how to use the spreadsheet correctly using worked examples. The workshop is free to members and associate members.</p> <p>Chris Barker advised the Chalk Conference is taking place on the 18th September, which may influence attendance numbers.</p>	
<b>8</b>	<b>EFFC</b>	
<b>a)</b>	<p><b>EFFC Tremie Concrete Guide: 2<sup>nd</sup> Edition</b></p> <p>Ciaran Jennings reported there have been some late negotiations with the French member of the EFFC which have now been resolved and it is anticipated to launch in June at DFI Conference in Rome.</p> <p>Ciaran added the EFFC are waiting for a R&amp;D report from Thomas Kränkle from the Technical University of Munich to ensure there are no conflicts with the Concrete Tremie Guide.</p> <p>It was reported there are plans to give out the guide on EFFC branded USB sticks at the conference.</p> <p>Mark Pennington added there has not been any dramatic changes to the guide since the presentation in March.</p> <p>Ciaran advised there was some query around the acceptability range, however there is not too much change. He also reported a working group will be formed to focus on the implementation of the guide; the FPS Quarterly Committee agreed this would be the next phase of focus and there have been some volunteers.</p> <p>David Hard reported he has taken the role of Chair for the EFFC Technical Committee for the next four years, the next Technical Committee meeting will be held in London next year. It was noted the next EFFC Executive meeting is taking place in June.</p> <p>Chris Barker advised that the Historic England Architectural guide is being revised with updates, one big change is introduction to a risk register assessing the type of piling used in architecture. It was agreed to add this to the next agenda for discussion. Chris Oram suggested it is more for preconstruction.</p>	<b>FPS Secretariat</b>
<b>9</b>	<b>INDUSTRY EVENTS</b>	
	<p><b>Chalk Conference 2018</b></p> <p>The Chalk Conference is taking place in September, David Hard reported that all decisions on papers have been made and they will be published.</p> <p><b>Piling Conference 2020</b></p> <p>Following the Chalk Conference, a Piling Conference will be taking place in 2020, Mark Pennington advised he is part of the organising committee, the FPS may be able to influence.</p> <p><b>DFI EFFC Conference 2018</b></p> <p>The DFI EFFC Conference will be taking place in Rome on the 6-7<sup>th</sup> June 2018.</p>	

<b>10</b>	<b>SOCIAL EVENTS</b>	
a)	<b>FPS Summer ball 2018</b> The FPS Summer ball will be taking place at the MacDonalld Berystede Hotel in Ascot on the 30 <sup>th</sup> June 2018.	
b)	<b>FPS Golf Day 2018</b> The FPS Golf Day will be taking place at The Nottinghamshire & Country Club on the 12 <sup>th</sup> September 2018.	
c)	<b>FPS Annual Dinner 2018</b> The FPS Awards dinner will be taking place at the Intercontinental Park Lane in London on the 19 <sup>th</sup> October 2018.	
<b>11</b>	<b>ANY OTHER BUSINESS</b>	
	<p><b>Pile Dynamics Testing Seminar</b> Martyn Ellis advised there will be a pile testing seminar, hosted by Pile Dynamics after the Chalk Conference.</p> <p><b>BIM Model Pricing Enquiry</b> Owen Francis reported he is currently in the process of pricing the first piling enquiry which is just a model.</p> <p><b>Temporary Works Forum</b> Andrew Bell advised at the Temporary Works Forum there is new code of practice aimed at major infrastructure projects, he added this will have an impact on what FPS members do. It was also noted that HS2 have sponsored this. There will be risk and consequence classes in addition to management classes. It was published ahead of BSI 5975 which will be issued shortly; the FPS Secretariat agreed to add BSI 5975 to the next agenda.</p> <p><b>Working Platform Certificate</b> Toby Hayward explained he has experienced a few issues on repairs to large voids on the mat; he asked should this be added to the guidance note. Mark Pennington suggested this should be reviewed if there are some issues. Toby agreed to propose a modification to the guidance and circulate to the Committee.</p> <p><b>EC7: Retaining Walls</b> Ash Rogers asked if the Committee should be looking the Piling Section or the Retaining Walls section on EC7; Mark Pennington advised this had been a challenge on the piling section, Chris Barker suggested Stuart Hardy or Andrew Bond can advise. David Hard also suggested Tony Suckling may be able to advise. Mark agreed to talk to Tony who will be attending the meeting with Chris Raisons presentation.</p> <p>Ciaran Jennings added he will need to establish a date with Chris Raison to present to the Technical Committee.</p>	<p><b>FPS Secretariat</b></p> <p><b>T Hayward</b></p> <p><b>M Pennington</b></p> <p><b>C Jennings</b></p>
<b>12</b>	<b>DATE OF NEXT MEETINGS</b>	
	<p>13<sup>th</sup> September 2018 15<sup>th</sup> November 2018 <b>All meetings are to start at 10am and will be held at Hamilton House, Mabledon Place, London, WC1H 9BD</b></p>	