

FEDERATION OF PILING SPECIALISTS

MINUTES AND ACTIONS OF A THE TECHNICAL COMMITTEE MEETING

Date: Thursday 24th February 2022

Time: 10:00am

Location: Online via Teams

In Attendance

Ebenezer Adenmosun
Chris Barker
Zoe Baldwin
Jon Ball (Chair)
Andrew Bell
Devji Bhuva
Andrew Bond
Paul Chadwick
Jonathan Chaloner
John Chick
Jack Clayton
Christopher Cox
Sebastian Draghici
Chris Fox
David Hard
Andrew Heathcote
David Illingworth
Chris Oram
David Preece
Ash Rogers
Stefan Smith
Mark Toyne
Andrew Wandless
Lewis Yates

Geo Firma Consultants
Arup
Skanska
Roger Bullivant
Skanska
GSS Piling
Past Chair
Foundation Piling
Franki Foundations
Expanded
Rock & Alluvium
Atkins
Central Piling
Murphy Group
Bachy Soletanche
Keller
Pile Designs
Franki Foundations
Laing O'Rourke
Aarsleff
Keltbray
Socotec
Roger Bullivant
Van Elle

Present

Kathryn de Rochefort
Ciaran Jennings

FPS Secretariate
FPS Secretary

Owner	Action	Deadline
All	Feedback to Chris Fox and Kathryn (FPS Secretariate) regarding the ICE SPERW 3 rd Edition Table.	15 th July
C Oram	To create an email and send to individual members through the FPS to ask why there were significant delays in testing over the Christmas period.	26 th May
J Ball	To speak to the member company directors at the next quarterly about more active involvement with task groups.	21 st April
All	To send an email to the FPS inbox with any suggestions of how to measure the complexity of a project.	26 th May
J Ball	To contact Hanson to speak to the Technical Committee about low carbon alternatives.	26 th May
K de Rochefort	To create a page of the FPS website with a link to the carbon reporting on the EFC website.	26 th May
C Jennings C Barker	To meet with Luke Deamer and discuss what the page on the website about the carbon reporting tool should say.	26 th May
C Jennings	To put a call out for volunteers to joining the sonic logging task group.	1 st April
D Bhuva	To create a document about the collection of data with regards to product instrumentation.	
C Oram All	<ol style="list-style-type: none"> Chris O to create a document regarding structural engineers providing the worst-case scenario for design combinations. Any committee members to volunteer with the document. 	
J Ball	To draft a document around specifying BS standards.	26 th May
A Bond	To send Jon Ball a copy of the proposals for the Eurocodes.	
C Jennings	To arrange the next meeting to be held as a hybrid meeting.	26 th May

No	Topic	Action
1.	<p>Apologises</p> <p>David Roy (Keltbray), Michael Chalkley (Balfour Beatty), Neil Stone (Rock and Alluvium), Andy Martin (Foundation Piling), Brian Kelly (DAWSON WAM), Mark Pennington (Balfour Beatty) and Julia Hill (Roger Bullivant).</p>	
2.	<p>Minutes of the Meeting held on Thursday 4th November 2021</p> <p>The minutes of the last meeting were approved.</p>	
3.	<p>Matters Arising</p> <p>1. Rig Operating Data</p> <p>Chris Fox reported that the Sperwall taskforce had met. He asked everyone to provide blank copies of their daily site reports and whether they have different data levels in their reports for higher spec jobs. The intention is to define a typical data schedule that may be included in a future edition of the document. The group have put together an Excel Spreadsheet to collect the categories of data that are being recorded. Chris explained that they had outlined three categories; 1. Housing, small buildings, 2. Apartment blocks, offices, schools, landmarks, residential and hospitals, 3. Highways, Rail, Major Projects, Infrastructure and Nuclear; these reflect that there may be different types of information required by the nature of the project. This is just an initial idea, and it is up for discussion. Jon suggested that this could be completed somewhere in between the next meetings so that the Committee have a chance to review</p>	All

<p>before being presented again. Chris F stated that any feedback should be sent to him and Kathryn at the FPS.</p> <p>2. Testing</p> <p>Jon updated the group that there had been a shortage in availability of testers around Christmas and asked the group if they had any input or ideas as to why this had happened. Chris O added that this is going to be a reoccurring issue around Christmas then we will need to have future planning in place. No one from testing had joined the meeting so Jon suggested that we can raise the issue through the FPS to the individual members of the testing houses or we can revisit the issue at the next meeting.</p> <p>Chris O agreed that it would be to go with the first option and offered to put together some wording to go out to individual members.</p> <p>Andrew B added that many workers were isolating around Christmas and in the New Year due to COVID which could be the source of delays.</p> <p>3. Small Steering Groups</p> <p>Jon reported that he is keen to start involving more members in the task groups and that at the next quarterly he will be asking the Managing Directors to encourage more involvement from their teams.</p> <p>4. FPS Audit Update</p> <p>Ciaran reported that there has been a de-duplication exercise taking place to compare the FPS audit against ISO criteria looking at both the quality and technical sections. We found that there was a great deal of overlap with ISO9001. Roughly 95% has been duplicated so if a member already has ISO accreditation, then most of the FPS audit are just repeating what they have already been audited against.</p> <p>The feeling from the audit task group is that it falls to us to define what the next stage of good looks like and differentiates an FPS member from any other piling contractor. For these reason we are updating the auditing process and criteria to become an FPS member. There have also been discussions about adding sustainability criteria around recording the amount of carbon being produced to show a reduction over time and the carbon accounting that legislative changes shall make mandatory in the near future. Jon added that we are putting greater importance on sustainability in the audit, which means that the scoring will extend from “are we measuring the amount of carbon that we use” to “have we looked at alternatives and are we feeding that back to R&D”. We have also tweaked the qualifications, before it was primarily year based now, we have changed that to charterships (subject to agreement). Complexity of projects has been an issue that is also being looking into as complexity has previously always been tied to cost, but an expensive project is not always complex. Jon asked the group if they have any input on how they would assess the complexity of a job.</p> <p>Jonathan C suggested that you could look at the cost per pile to give an indication of complexity. Jon asked if that if anyone has any further thoughts to send them to the FPS email.</p> <p>Chris F questioned if the EFC carbon spreadsheet would be used to score on the environmental section of the audit. Ciaran reported that has not been decided yet and currently they are looking for members to report their carbon consumption for scope 1 and 2 on a quarterly basis.</p> <p>Chris B questioned what the EFC is currently doing with the members in regard to recording their carbon consumption and highlighted that many clients are now requiring the use of lower carbon alternatives and that there has not been consistent use of the carbon calculator throughout the FPS. John Chick added</p>	<p>C Oram</p> <p>J Ball</p> <p>All</p> <p>All</p>
--	---

	<p>that the way sustainability is going is that we need to measure what we are using, the equipment that we use and the way that we do it. There is a design issue around things like factors of safety and we need to challenge the designs of what we are putting the ground.</p> <p>Ciaran reported that the EFC are looking to run a pilot project to collect Scope 1 and 2 emissions, and Scope 3 if they have the data, from around 50 companies initially and have the data reported each quarter. This will help establish a benchmark and hopefully show a reduction overtime.</p> <p>Jon suggested that we should have a sustainability in design task group to look at this issue further and it may also be helpful to have the latest carbon tools available on the FPS website. Ciaran reported that the FPS sustainability group did start to look at this but did not move very far with it, so it may be worthwhile updating them on any progress that you have.</p> <p>Jon added that at RBL they have been looking reducing their carbon output and have hit a barrier in terms of sulphate resistance. He asked do we want to revise SD1 and consider new technologies of cementitious content and replacement? Andrew raised that there is the further guidance in IP1705, but BRE is limited. John C proposed that Hasan could be brought into this discussion as they have 90% replacement on their works.</p> <p>Ciaran added that we may need to have some form of recognition by the British Standard Institute (BSI) and possibly have a national annex to recognise low carbon materials as the standards will take seven years to change. Chris B highlighted that the FPS website does not have anything on it about the carbon reporting spreadsheet, we could have page about it that indicates our support of the reporting initiative and have link to the EFC website. Ciaran and Chris B will speak with Luke Deamer to put together what the page will say on the FPS website.</p>	<p>J Ball</p> <p>K de Rochefort</p> <p>C Jennings C Barker</p> <p>C Jennings</p>
<p>4.</p>	<p>John Chick Presentation on Sonic Logging and Cages</p> <p>John C shared his presentation with the group and stated that this presentation would be around the debate regarding sonic logging and to ask the Technical committee what can be done to either replace it. He explained that to date he had not encountered a convincing argument for it being used.</p> <p>John continued to explain why we have used sonic logging historically. He set out the safety issues, explaining piles often have a two or three-part cages which means the cage can be between 20-30 tonnes in weight, the tubes are telescopic and have to be manually joined in the pile. This can cause workers to lose their fingers, injure their hands and even suffer facial injuries from cages moving during installation etc; this is a current and ongoing issue.</p> <p>There is also evidence to support that the use of sonic logging is introducing anomalies into piles more often than there are ones present as a result of poor construction. John shared a table in his presentation that related to the damaging of piles while using the sonic logging tests. He pointed out that we have other methods of testing such as TIP testing and pile records that can provide data to support the quality of the pile as an alternative.</p> <p>John asked what the FPS Technical committee could do to validate and promote safer, and possibly more effective alternative test methods for large, bored piles.</p> <p>Jon Ball suggested we have had a similar issues with CRP tests, it is still specified in the current SPERWALL guidance as well as being mentioned in Eurocodes,</p>	

	<p>but we could have an FPS position paper on the use of sonic logging based around safety issues. Andrew added that other methods such a thermal profiling are still seen as ‘new methods’ and there is a level of hesitancy to use it. He suggested it may be due to a lack of data of the newer methods that is making clients less willing to stop using sonic logging even if they have been warned about the inherent danger and likelihood of onsite incidents. John C highlighted that the data is already out there it would just need to be crossed referenced.</p> <p>Chris O suggested if we know it is dangerous then we should simply refuse to do it. Andrew added that the science behind sonic logging is sound, but it can cause abnormalities and is a massive safety risk. Lewis added that a position paper from the FPS could be a powerful tool to combat this issue.</p> <p>Chris B stated the criteria for cross hole sonic logging are black and white but with thermal testing it is still subjective. We would need some kind of criteria that specify when you need to investigate further or not. Jon suggested that this could be added to the guidance to start moving away from sonic logging over to thermal testing and have the categorisation for that. Jon also proposed that it would be worth setting up a task group to look at this in greater detail. Ciaran added the early careers group are keen to get involved in projects like this and would be happy to help.</p> <p>Volunteers were asked to put themselves forward to join a task group. Andy Bell committed to finding someone within Cementation who would support the work.</p>	<p>All</p>
<p>5.</p>	<p>Common Instrumentation Platform</p> <p>Ciaran reported that he had a conversation with John Chick before Christmas about starting to look at this topic within the Technical Committee. The main challenge is that there are lots of different instruments onsite around piles and they are all out putting data in various formats, so we were looking to define a common standard and format. John C highlighted that it is not about rig instrumentation, but product instrumentation with a view to being able to collect the data to be able to reuse a structure.</p> <p>John suggested that Demetrios Salametes could attend the next Technical meeting and to give us an overview of what his thoughts are and take this point forward from there.</p> <p>Lewis highlighted that most of the data does not have any contextualisation. Chris B added that the biggest problem is the ownership of data and the transfer of this between owners when a building is handed over.</p> <p>Ebenezer stated that when using capping beams and secant walls as a company he does not often see the data but when we have seen the data, they have not moved which suggests that they have been overdesigned.</p> <p>Chris B added that the industry may also be missing out on ‘big data’ and having large amounts of data available.</p> <p>Jon B suggested that we may need to layout in a document what data we need. Devji volunteered to start putting a document together.</p>	<p>D Bhuva</p>

<p>6. Action Derivation</p>	<p>Jon B reported that there a portion of structural engineers that have been lax in terms of their data output and we are often given fifteen to seventeen different load cases to work through. He felt there is a need to produce a short document that will refer back to the Eurocodes that requires the worst-case scenario for the design combinations and reminding engineers that is the case.</p> <p>Jon asked the group if they can assist with creating that document and also asked Andrew Bond send Jon where this can be found in the Eurocodes.</p>	<p>All C Oram A Bond</p>
<p>7. CIRIA-Update of 1970's Piling Guide</p>	<p>Andrew reported that he had spoken to Erica Wilcox, and it is currently behind on the original plan. The structure and planning content was finalised in November of last year. Erica has struggled to progress this any further in the last three months, which mean we are about three to four months behind schedule.</p> <p>Andrew has asked Erica to update the program so that it can be shared with the committee and is pushing to get things moving again. The author group will be meeting next to polish off certain areas.</p>	
<p>8. Sustainability</p>	<p>Jon felt that sustainability had been covered under the FPS audit but highlighted that the CLC Zero Carbon Strategy documents has been brought to the attention of the committee, Ciaran will circulate the document to be discussed at the next meeting.</p>	<p>C Jennings</p>
<p>9. Specifying BS Standards</p>	<p>Jon reported that he had been actioned to specify BS Standards, which falls out of the LABC and the NHBC concerns that have previously been discussed. Jon will draft a document before the next meeting to be reviewed.</p>	<p>J Ball</p>
<p>10 Eurocodes & Execution Codes</p>	<p>Andrew B reported that the November 2021 draft from SC7 is with CEN and is being translated into German and French.</p> <p>We expected to have part 1, 2 and 3 by October time for formal enquiry, which is when BSI will be asking for comments given and the FPS will need to add any comments.</p> <p>SC7 is using this time to run a parallel review on all of its task groups in order to create a single comment that can be added rather than having all European countries add in the same or similar comments, so comments are being pre-agreed.</p> <p>There has been a push from Germany to push their methods into the Eurocodes. Jon questioned if we could see the proposals in September and positively affirm what the FPS want, Andrew B agreed but added that he will need to wait for CEN to return the document and currently does not have a timetable for that and will forewarn of any changes.</p>	<p>A Bond</p>

	David reported that there have been no updates for the Execution codes, but he has contacted the secretariate to ask what the status with the 3-4 standards that were due to be reviewed.	
11	Any Other Business Chris B enquired if there were any plans to have physically meetings again. Jon B suggested that the next meeting could be held physically but also have a hybrid element, just for the next meeting. Ciaran will look into arranging a meeting room.	C Jennings
12	Next Meetings Thursday 26 th May 2022 Wednesday 7 th September 2022 Thursday 3 rd November 2022	