IIT PEARS BUILDING PROJECT

DETAILED BASEMENT CONSTRUCTION PLAN TECHNICAL MEETING

MINUTES OF MEETING

Project	Pears Building
Date	Thursday - 28.09.2017
Time	08:30 – 11:00hrs
Meeting Ref.	Basement – Technical Meeting
Location	Willmott Dixon's Offices – 44A Pentonville Road, London, N1 9HF

Present	
Dr Michael de Freitas (MdF)	First Steps Ltd
Michael Eldred (ME)	Eldred Geotechnics Ltd
Ian Stephenson (IS)	Stephenson Davenport Structural Associates Limited (SDStructures)
Phill Cracknell (PC)	Willmott Dixon Construction (WDC)
Roy Conway (RC)	Willmott Dixon Construction (WDC)
Opher Tolkovsky (OT)	Soil Consultants (SC)
Tony Suckling (TS)	ASquared (A^2)
Najib Sheeka (NS)	Heyne Tillet Steel (HTS)
Mark Duncombe (MD)	Lucking + Clarke (L+C)
Dr Stephen Thomas (ST)	OGI Groundwater Specialist (OGI)
Howard Curtis (HC)	OGI Groundwater Specialist (OGI)
Apologies	
None	

Previous Minutes
On file.

ITEM	Description	Action By	Target Date
1	**MEETING DISCUSSION** PC opened the meeting thanking all for their attendance and provided an overview of the previous 2-3 months activities. This also made reference to the added monitoring equipment installed particular on the Church and impending works planned for the School.	Note Note	
2	The forthcoming timetable was given as follows: - Finalising of the Detailed Basement Construction Plan (DBCP) was in hand with the expectation that once accepted by Campbell Reith (Royal Free Charity's Independent Engineers) it would be submitted to the London Borough of Camden (LBC) before w/c 9th Oct'17. - The timetable thereafter would be dictated by LBC taking into account that LBH Wembley will be acting as their certifying engineers.	Note Note	
3	TS gave a synopsis of the Geotechnical Design Report (GDR) and the parameters used in the Ground Movement Assessment (GMA) highlighting the following key changes from previous studies: - Extended boundaries - Changed ground model parameters - Ground water conditions. In conclusion; it was stated that using conservative figures the predicted impact on the structural integrity of the Neighbouring Properties was "category 0 (negligible)" with reference to the Burland Category of Damage	Note Note	

ITEM	Description	Action By	Target Date
4	MdF reiterated his previous statement of *"have we got a model which represents what the ground is – do we know how it will respond to changing conditions – if something happens and it is picked up by the monitoring regime - will we know how to interpret the results ?"* In response it was stated that the model is based on over conservative parameters – predictions have been established – continuous monitoring will take place and adjustments to the model will be made if necessary.	Note Note	
5	Coupled with the above TS stated that the proposed trigger limits for the inclinometers for settlement and horizontal movement will be set and mitigation measures will be put in place if necessary; for example: - Retained crushed material will be held on site to introduce berms to provide added restraint. - Props will be available to safeguard against excessive movement.	Note	
6	Borehole logs were discussed. TS/OT confirmed that they had not seen enough evidence to suggest any slip planes within the 41 holes drilled across the RFC/Hampstead Green/St Stephens site.	Note	
7	Furthermore; it was accepted by all, that control of near surface water was key. To this end ST stated his scheme was primarily focused on not allowing the surface water to back-up and disturb the affected ground stresses.	Note	
8	MdF enquired into what was the chemical make-up of the surface water and how is the design future proofed (ie what if the system became 'bunged up' (ie less permeable) by dissolved solids (iron oxides)). In response; ST stated that whilst the installation wouldn't be easily accessible, the system design would incorporate major redundancy and that the system will be more about pressure reduction than dewatering. ST reiterated that such a system of pressure relief does not need maintenance. This is no different to the thousands of retaining walls around the country that have bleed wells/ drainage holes that prevent the build-up of pressure behind the wall.	Note Note Note	
9	In addition; it was also accepted that the depth of the surface water drainage was critical and cognisance should be taken of running water uncovered at a depth of circa. 2.0m in the trial pits adjacent to the church tower.	Note	
10	ST stated that whilst their Groundwater Collection Strategy Report was very detailed, it is not a detailed design at this stage. However this would form the schematic for the DBCP and would further evolve with the design.	Note	

ITEM	Description	Action By	Target Date
11	It was concluded that whilst MdF/IS/ME had been issued with parts of the DBCP namely the following: Appendix B – updated Ground Investigations Report (GI) Appendix D – Geotechnical Design Report (GDR) The complete document would be made available over the forthcoming 1-2 weeks through RFC and Michael Taylor. MdF/IS/ME stated whilst they had yet to undertake a detailed review of those documents in their possession they would welcome further sessions with selected members of the team to review. WD stated that they would have no issues with this, however they would seek confirmation from RFC that this could happen.	Note Note WD	
12	WD confirmed that all Structural/ground and environmental monitoring will be in place by Mon 2 Oct 2017. This included agreed prism locations to St Stephens Church and Hampstead Hill School.	Note	
13	WD confirmed that the monitoring strategy that will be included in the future DBCP shall act as a 'early warning system' in that excavation shall work from South to North. Inclinometers will then pick up any ground movements should they occur. Monitors to the Church and the school will be manual read prisms that will be read at a frequency relating to the stage of construction. These were agreed with Mr Taylor of STSRT to ensure that the effect of these installations would have minimal impact to his buildings.	Note	
14	MdF stated that the St Stephens inclinometer shows some 'interesting results down to 6m – (these are small movements but nothing like the 'step' you would expect to see in a classic shallow slip). TS/OT stated that the inclinometers installed by SC (beyond the St Stephen's land) to date showed very small movements which has not indicated anything conclusive/significant.	Note	