

# THE GRENFELL TOWER INQUIRY

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## EXHIBIT DPB/5

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This is the Exhibit marked “DPB/5”  
referred to in the witness statement  
of David Paul Bradbury

## GRENFELL TOWER (3482) MINUTES OF DESIGN TEAM MEETING No.2

Held on site at Grenfell Tower 2<sup>nd</sup> September 2014. 10am

Present:

Name

Simon Lawrence	(SL)	Contracts Manager	Rydon
(RML)			
Simon O'Connor	(SOC)	Project Manager	
Rydon (RML)			
Neil Crawford	(NC)	Project Architect	Studio
E (STE)			
Suleyman Ekingen	(SE)	Project Engineer	
Curtins (CC)			
Dan Anketell-Jones	(DAJ)	Façade Design Manager	Harley
(HCW)			
Kevin Lamb	(KL)	Façade Project Designer	
Harley (HCW)			

*see page clause 4.51. Dry Riser.*

Apologies:

(Invites optional for this meeting)

Bruce Sounes	(BS)	Lead Architect	Studio E
(STE)			
Terence McLaughlin	(TM)	Design Assc. Director	
JSWright(JSW)			
Dave Bradbury	(DB)	Senior Designer M&E	
JSWright(JSW)			
Andy Bridges	(AB)	Electrical Engineer	
JSWright(JSW)			
Dan Moody	(DM)	Electrical Engineer	
JSWright(JSW)			

Distribution:

All those above, plus: Ray Bailey (HCW) and Robin Thorne (JSW)

Minutes taken by: Simon Lawrence

		ACTION
<b>1.00</b>	<b>Introductions</b>	
	SL confirmed that is his intention to initially hold fortnightly meetings but would review prior to the meeting who is required to attend and who is optional. This being the case JSW weren't required at this meeting. SL agreed to table there several comments.	Note
<b>1.10</b>	<b>Previous minutes</b>	
	No comments by team. Therefore taken as agreed	Note
<b>2.00</b>	<b>Consultants appointments, warranties and Schedules of services</b>	
	Ongoing. Currently with RML legal department for comment. SL confirmed RML contract with KCTMO is now signed and anticipates appointment comments from his legal team by end of week.	SL
<b>3.00</b>	<b>Façade Works – Harley Curtain Walling Ltd</b>	
<b>3.10</b>	<b>Report from HCW – progress/design/programme/procurement/key risks</b>	
3.11	No progress report required at this stage from HCW. HCW confirmed that their initial design and programme risks are in connection with the head & cill details around the windows and the cassette support rails. These will be bespoke extruded aluminium sections so long lead times. HCW to confirm lead times and design programme – outstanding. DAJ confirmed that Rob Maxwell is key to this and he has been on unexpected leave. DAJ confirmed that the priority was to get the window head and cill angles approved by next week (w/c 8 <sup>th</sup> Sept) so HCW are able to get the dies cut and angles in production.	HCW
3.12	SL discussed programme with the team and asked for their input with regards to procurement and design	Note



	times. <u>SL confirmed that the critical date for all is Christmas shutdown 2014. The internal works within the flats must start on 12<sup>th</sup> Jan 2014 as planned otherwise the completion date is at risk.</u>	
<b>3.20</b>	<b>Architects report</b>	
3.21	NC confirmed that he will issue a full set of cad drawings to the team via We Transfer, an external weblink like Dropbox.	NC completed
3.22	HCW and StE discussed the comments made on HCW prelim detail drawings (C1509 series 22.8.14) The main discussion was around the cladding joint sizes and whether the 'Birdsmouth' detail was in or out with Planning. SL felt that the 'Birdsmouth' detail was out. NC to check BC thoughts as he has the most knowledge. NC to make further comments by marking up drawings if required.	NC
<b>3.30</b>	<b>Structural Engineers report</b>	
3.31	SL assume that the structure had been checked for the cladding loads previously. SE requested the loads from DAJ and he will recheck.	DAJ /SE
3.32	SE to confirm wind loading requirements to DAJ	SE
<b>3.40</b>	<b>Review RFI tracker</b>	
	None at present	
	<b>Design areas</b>	
<b>3.50</b>	<b>Windows – external</b>	
3.51	SL requested sample window as a mock-up is required for resident viewing in Flat 145. Ideally if we can fix a window externally in position around Flat 145 asap then RML can carry out sample internal trimming. DAJ to look into this.	DAJ ongoing
3.52	SL stated that particular attention should be paid to	Note

	the trickle vents installed to the windows to ensure that they are fit for purpose on tower block use. No whistling or vibrating from wind.	
3.53	PMN – Following inspection of Flat 145 after the meeting BC highlighted potential overlap between window frame and internal kitchen partition wall to lounge in 2 Bed Flats. This is a design area which will need some investigation works to solve.	StE&HCW ongoing
<b>3.55</b>	<b>Windows - internal</b>	
3.56	SL confirmed that if possible he would like to leave the existing outer window frame in place to reduce damage to residents window reveals. Discussion around if this is possible and whether it has any impact on area of light through the window. SL agreed for RML to survey Flat 145 so we have a record of sqm of light through existing windows to ensure that there is no reduction with the new windows.	SOC
<b>3.60</b>	<b>Cladding (insulation, fixings, panels, etc)</b>	
3.61	KL highlighted future programme risk at the end if cladding panels to the ground floor entrance canopy are to be measured following structural frame install.	Note
3.62	U-values were discussed with SL asking how the figures in the spec. were arrived at and whether they need to be rechecked from an M&E and insulation point of view. Is the insulation thickness show on Architect drawings, correct. DAJ confirmed that he had checked them but with the assumption that RML were fitting further insulation internally. SL didn't believe this was part of the spec. All parties agreed to check their documents.  PMN – Max Fordham tender U-Value document was shared to team via email. External wall construction was checked against all tender information and all	RML, StE, HCW



	information shared. The only areas to have new internal wall treatment is on the lower 4 floors.	
<b>3.70</b>	<b>Information Required</b>	
3.71	KL requested the size of kitchen extract fan so the fixed panel at the top of the kitchen windows can be sized correctly. SL to discuss with JSW and confirm.	JSW & SL
3.72	Further to 3.71 clarification is required around the fixed extract fan panel. HCW believe that it is a glazed in louvre panel, where as SL was under the impression that it would be an insulated panel which would have a standard white extract fan cover showing on the outside. This was something that he discussed with BC during the planning discharge submission process. NC confirmed that the planning render drawings looked like a louvre panel. NC to check the history with BC for discussion next time. Potential solution was discussed that if the external louvre has to stay as a colour rather than white plastic then we could look at fixing a powder coated louvre to a fixed panel and then the extract fan could be fixed in place from inside.	NC / BC
3.73	KL asked for confirmation of dimensions for the South East curtain walling section around the staircase. SL confirmed that RML are looking to change the infill slab design to the head of the curtain wall to a structural steel design rather than casting a concrete slab. However the bottom of the slab whatever the make up will have to be in line with the adjoining slab. The same with the windows. Therefore HCW can still survey existing opening. SL and SE to look at floor structure.	SE / SL
<b>3.80</b>	<b>CDM – safety</b>	
3.81	BC suggested asbestos will be a risk for all works. SL	SL

	confirmed that he has asbestos information from KCTMO on a register and will issue this before the construction works are carried out. The main risk areas in connection with the Façade works is around the artex ceiling within the flats and any fixing required for internal trims. Another contractor will be carrying out internal trims.	ongoing
<b>3.90</b>	<b>Value Engineering</b>	
<b>3.95</b>	<b>Maintenance</b>	
3.96	SL mentioned his concern around the Crown detail how an Abseiling Maintenance Team could use ropes over the top without damaging the crown detail. Explained previous job (Ferrier Point) where there was a requirement to install a substantial guide rail around the coping to prevent damage from ropes. The team visited the roof to understand issue. SL to ask Client what their Maintenance procedure currently is. SE, NC and HCW to look into solutions.	TEAM
<b>4.00</b>	<b>M&amp;E Works – JS Wright &amp; Co Ltd</b>	
4.10	Report from JSW – progress/design programme/procurement	
	SL discussed programme with the team and asked for their input with regards to procurement and design times. <u>SL confirmed that the critical date for all is Christmas shutdown 2014. The internal works within the flats must start on 12<sup>th</sup> Jan 2014 as planned otherwise the completion date is at risk.</u>	Note
<b>4.20</b>	<b>Architects report</b>	
	None at present	
<b>4.30</b>	<b>Structural Engineering</b>	
4.31	SOC asked SE if he has had a chance to look at the proposed core hole layout send by JSW for the riser pipe work as we need to progress with the works. SE requested that SOC highlight the priority holes and he	SOC/SE



	will look at them asap.	
<b>4.40</b>	<b>Review RFI tracker</b>	
	<b>Design areas</b>	
<b>4.50</b>	<b>Mechanical</b>	
4.51	<p>DB highlighted concerns around the Dry Riser alterations and whether building Control would enforce the system to be upgraded to a Wet Riser. Communication with the building Control Officer required asap.</p> <p>PMN – An email conversation has happened between DB and building control Officers John Hoban and Paul Hanson with the response confirming that the system can stay as a Dry Riser as no additional floors (in height) are being added to the system.</p>	Note
4.52	<p>DB confirmed that they will be needing U-Values in order to design and size the Heating system correctly.</p> <p>Refer to Item 3.62 above</p>	Note
4.53	SL confirmed that he was introducing JSW to client's consultant Matt Smith of Max Fordham that afternoon.	Note completed
<b>4.60</b>	<b>Electrical</b>	
	None at present.	
<b>4.65</b>	<b>AOV system</b>	
	BC stated that any works around the AOV system would need LFB approval, so early engagement is essential. This will also be relevant if the change of office use to flats on the Walkway and Mezzanine goes ahead.	Note



<b>4.70</b>	<b>Information required</b>	
<b>4.80</b>	<b>CDM - safety</b>	
	See Item 3.50.	
<b>4.90</b>	<b>Value Engineering</b>	
<b>4.95</b>	<b>Maintenance</b>	
<b>5.00</b>	<b>Lower floor area - various</b>	
<b>6.00</b>	<b>Acoustic Engineer</b>	
<b>7.00</b>	<b>Planning</b>	
7.01	<p>An overview of the Planning Application and discharge was given by BC &amp; SL to bring everyone up to speed. Following several months of discussions, mock-ups and negotiations the final material submission was forwarded to Planners at the end of July. Formal sign off is anticipated 29/8/14. Our feelings are that the risk around planning sign off is now low as the design to date is now in line with the Planners requests.</p> <p>SL confirmed that we are to proceed design based on the following criteria.</p> <ul style="list-style-type: none"> <li>• Champagne coloured Cladding panels for the main part of the building, existing residential floors.</li> <li>• Rainscreen cladding to be cassette (hidden fixing) type.</li> <li>• Low level cladding (around ground up to 3.1m) to be GRC panels around columns and brick work around the vents.</li> <li>• Joints to column cladding to be closed, two panels abutting rather than open 'Birdsmouth' feature.</li> <li>• No external louvres to windows</li> </ul>	SL

	SL chasing KCTMO Planning advisor for response.	
7.02	SL confirmed that KCTMO has put in planning application for change of use to the proposed office areas on the mezzanine and walkway levels. These are now likely to become 2no. additional flats. If these changes go ahead they will have impact to the structural openings on the lower floors, AOV system and fire strategy of the building. SL to chase client progress and formal decision on the change.	SL ongoing
7.03	SL confirmed that KCTMO are also looking at changing the proposed ground floor concierge area into a community room. Initial designs have been issued by StE for Client comment. SL to chase client progress and formal decision on the change.	SL ongoing
<b>8.00</b>	<b>Statutory Services</b>	
<b>9.00</b>	<b>Building Control</b>	
	BC confirmed that Building Control application has been made. RML to issue payment once invoice received. BC also highlighted that the RBKC Building Control have been an issue on a neighbouring project he is involved in due to their slow response.  PMN – John Hoban is the RBKC Building Control Surveyor assigned to this project. His contact no. is [REDACTED] Paul Hanson is the Senior BC Officer who deals with Fire.	Note
<b>10.00</b>	<b>SAP calculations</b>	
<b>11.00</b>	<b>Samples</b>	
	See HCW window comment. Item 3.31	Note



<b>12.00</b>	<b>Value Engineering</b>	
<b>13.00</b>	<b>Code / BREEAM / Energy</b>	
	SL confirmed the John Milner from Baily Garner is the BREEAM consultant employed by RML for this project. SL has had initial meetings with John to review the tender BREEAM assessment. SL will invite John to a DTM in the near future for his input.	SL
	SL to send Tender BREEAM assessment out to team.	SL completed
<b>14.00</b>	<b>Contractual / Client matters</b>	
	SL stated that the full contract is being checked by KCTMO and RML at the moment with the anticipation that it will be signed by the end of August. This in turn will allow RML to enter into full contract with their supply chain and designers. SL confirmed RML has signed the contract.	SL
<b>15.00</b>	<b>Maintenance</b>	
<b>16.00</b>	<b>Any Other Business</b>	
	It was agreed by the table that future DTM's will be held on a Tuesday. It will be held in two sessions the first will be from 9am-10.15am for M&E works and the second will be from 10am-11am for Façade works. There is to be an overlap of 15mins as required to discuss co-ordination between trades.	Note
<b>17.00</b>	<b>Date of next meeting</b>	
	Tuesday 23rd September 2014 – 3 weeks due to clash with RML Client meeting.	