### Message

From: REED Neil [/O=ORGARTELIA/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=NEIL

REED5D7]

Sent: 3/20/2015 3:38:31 PM

To: LIM Chweechen [/O=ORGARTELIA/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=Chwee Chen Lime86]

CC: VALENTE Nick [/O=ORGARTELIA/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=VALENTE Nickcc9]

Subject: FW: URGENT: Grenfell residents meeting of 17 March

Attachments: image001.jpg

Chweechen,

Are you dealing with the 2<sup>nd</sup> point?

Clair has called me and I have said that it is highly unlikely any of us can make a meeting on Monday.....noting that even if we could I am not sure we should be attending (scope creep?).

She has asked me to comment on the below....which I am reading now....but I thought I would ask about the 2<sup>nd</sup> bullet.

Happy to discuss.

thanks



Neil REED Head of Project Delivery

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From: Claire Williams [mailto:clwilliams@kctmo.org.uk]

Sent: 20 March 2015 11:28

**To:** M.Smith@maxfordham.com; REED Neil **Cc:** d.campbell@maxfordham.com; VALENTE Nick

Subject: FW: URGENT: Grenfell residents meeting of 17 March

#### Chaps

This is for information, in relation to the residents concerns over the HIU location.

- Matt, do you have any queries over the text?
- I have asked Artelia to understand any cost implications of relocating the HIU from the kitchen, boxing in etc.

Currently residents are saying the HIU relocation is the TMO cost saving, whereas the TMO is promoting this location on technical grounds and the lesser disruption. So with Peter Maddison and other managers we are meeting at flat 145 on Monday to talk this through. Simon Lawrence has offered to talk through the issues with the various options as below. The TMO will then put in place a communications strategy next week.

I am between meetings at the moment, so please respond in writing for my return to my desk.

Thanks

Claire Williams Project Manager



t: (m:

a: The Network Hub, 292a Kensal Road, London, W10 5BE

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From: Simon Lawrence [mailto:slawrence@rydon.co.uk]

Sent: 19 March 2015 12:54

To: Claire Williams; Simon O'Connor

Subject: RE: URGENT: Grenfell residents meeting of 17 March

Morning Claire,

Firstly to answer 2 & 3:-

Installing new heating infrastructure services within an existing occupied tower block always presents additional design challenges compared to a new building project. We are not able to increase the physical size of the building. So we have to design the installation of any new system around the existing ceiling heights and floor space. In addition to this because Grenfell is fully occupied so we need to keep the existing systems working whilst we are installing the new. If

Artelia\_00010093

we didn't do this then each flat would be without heating or hot water for at least 6 months. This is obviously not an option. So because of this the new infrastructure has to be located in a different place to the existing.

The communal lobby areas were chosen as the best location to install the new pipe work as it had the least impact to the residents individual flat size and allowed accessibility for future maintenance works. The compromise to this location is that there will be a reduction in ceiling height and floor space to allow the substantial amount of pipe work to be connected to every floor and flat.

When Rydon were contracted to carry out the works their design team looked at each pipe size and location to see if they could minimise the space needed for installation. One of the challenges was the amount of pipes needed to connect each flat from the main vertical riser pipes. There are 3 pipes to each flat (18 pipes in total per communal lobby) which are connected to the main riser pipe. When installing that amount of individual pipes there will always have to be points where pipes cross over each other (i.e. one pipe above or below another). Because of the diameter of each pipe including the insulation and fixing bracket it meant that every time the pipes cross it would reduce the ceiling height by around an additional 100mm (4").

Because of the existing low ceiling height within Grenfell, the Rydon design team investigated numerous pipe routes across the ceiling to try and reduce the amount of pipes crossing thereby keeping the new ceiling as high as possible. The design solution which gave the best new ceiling height was the one where they kept as many pipe crossovers, isolation valves, etc within the new riser cupboard rather than on the ceiling. However by doing this it meant that the new riser cupboard had to be slightly deeper by around 400mm (15") than originally anticipated. This also allows for safe access to carry out maintenance. The Rydon team also designed the pipe routes so they were as close together a practically possible. This has meant that there aren't any pipes fixed in the section of ceiling directly outside the lifts. This area can be left as existing without a new lower ceiling.

#### Answer to 1:-

The original KCTMO design proposal was to disconnect the existing water storage tank located in a cupboard within each flat and reinstall a new HIU (Heat Interface Unit) in its place. Once Rydon were contracted to carry out the works, their Design Team and the KCTMO team revisited the HIU position to ensure it was the best solution from a residents and technical point of view. There are pro's and con's for each solution but the team as a whole felt that installing the HIU in the halfway whilst meant the loss of some wall space was the better solution all round. Please see below a list of pro's and con's discussed for each option.

## HIU located within the cupboards

### Pro's:-

· New HIU not visible as hidden in cupboard

### Cons:-

- Connecting the new HIU the primary pipe work (same size as the communal pipe work) would have had to run
  across every hallway, bathroom and w.c. ceiling to reach the cupboard. This was to be boxed in to hide the
  pipes. As the primary pipes are a larger diameter with insulation and fixing brackets the boxing would have to
  be substantial. Resulting in it being unsightly across three rooms.
- A large number of residents have kitchen units or other obstructions limiting the access to the cupboards. Whilst
  Rydon still need to get into the cupboard to turn off the old system and run several pipes the working space
  required is considerably smaller and is far less disruptive than getting access to cut out an old large water tank
  and installing a new HIU.
- Maintenance Both the residents and the TMO's Maintenance contractors will need to be able to access the HIU. This isn't easily or safely done when hidden within a cupboard.

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In order to remove each existing water tank within the cupboard Rydon would need to shut an isolating valve on
the old system within each flat. This would allow all of the other flats above or below to continue to receive hot
water whilst the works were going on. If any of the isolating valves or existing pipe work failed (which is very
possible as its an old system) then every flat above or below the flat being worked on would need to be shut
down until the problem was fixed. So an issue in one flat could affect up to at least 20 others, potentially on a
daily basis.

## HIU located in the hallway

### Pro's:-

- Boxing to the ceiling pipes is confined to the hallway section only. This section would have been boxed on either solution. No unsightly boxing to bathroom and w.c.
- Less disruption to the cupboards and other areas within the flat.
- Easy access to maintain in the future.
- Less risk of disrupting multiple flats at any one time. The new location allows Rydon to get the new system within each flat installed and tested without the final connections. Then later in the year change turn the old system off to 20 flats and changeover in one go with a short visit per flat, approx. 1hr. So residents disruption of heating and hot water will be minimal compared to the other solution.

#### Con's:-

 HIU is now visible and on display in the hallway. The HIU chosen is the same manufacturer as specified originally but the model has been changed for the slimline version. Compared to a combi boiler this is smaller. Effectively they provide the same function.

I've not mentioned the need to fix through Asbestos ceiling for the pipe work boxing if the HIU is in the kitchen cupboard. I assume you don't need to be questioned on this by Mr Daffarn.

Apologises for the text colours, I was trying to highlight the answers from the email. If you need anymore info then please let me know.

Regards

Simon Lawrence, ACIOB, MInstLM Contracts Manager



From: Claire Williams [mailto:clwilliams@kctmo.org.uk]

Sent: 19 March 2015 09:50 To: Simon O'Connor Cc: Simon Lawrence

Subject: URGENT: Grenfell residents meeting of 17 March

# Simon

I just had some feedback on the residents meeting the other night, re their concerns over the heating layout. I need to urgently put something in the newsletter which is due out this week!

- 1 HIU location HIU too big and why in hall and not in kitchen as first shown
- 2 Cupboard in hall deemed to be un-necessarily large and eating into communal hall area
- 3 Lowered ceilings why so low

Can you please URGENTLY ask JS Wright to do me a concise paragraph for each of these items in layman's terms?

I am talking to Peter Maddison about putting this in the newsletter, and he is considering other options in terms of counteracting the information put out by residents.

Claire Williams Project Manager



t:

m:

a: The Network Hub, 292a Kensal Road, London, W10 5BE

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