Building Meeting – Ark Conway Primary Academy

29.9.16

Panel:

- Melanie Hobson – Air Quality Specialist from Aether
- Kerrie Norman – Head of Construction from Ark (absent)
- Jenny Duncan – Head of Projects from Ark
- Jess Stilerman – Project Manager from Ark
- Julia Chamber – Head of Technical from the Education Funding Agency
- John Brownlow – Head of Buildings Professional Services from 3BM, the Technical Advisors
- Chris Wrench – Project Manager from 3BM, the Technical Advisors
- Damian McBeath – Executive Headteacher of Ark Conway
- Lois Osborne – Head of School for Ark Conway

Minutes taken by Rebecca Carver

Damian: Introduction to meeting. A few weeks ago, an issue came up on site. We wanted to get the people who know most together for a meeting and answer your questions and talk about implications. Introduced the panel.

Melanie (with PowerPoint presentation attached): I’m here to talk about air quality and have looked at 2015 air quality report. I will give brief presentation and then questions at end. Air pollution in London is an issue – worse than other parts of UK. Two worries – Nitrogen Dioxide (measure by annual mean, which is applicable for residential and hourly mean, which is applicable for shopping areas and schools. Particulate Matter - caused by traffic, can cause heart and lung disease, measured by annual mean and daily mean. 2010 data on London pollution – (data image shown) yellow areas exceed annual mean for nitrogen dioxide. Air pollution is not good in London but is improving due to low emission zone, hybrid buses, improving vehicle standards and getting rid of over 6000 taxis. Aim of ultra-reduction of nitrogen dioxide in 2020 in central London. Local area – point of local monitoring sites – looked at 2013, 2014, 2015 data. Slight improvements over last couple of years – a step in the right direction.

I have looked at AECOM report – the methodology is all in line with air quality assessments, the aim is that emissions should not get worse with developments and the report suggested various mitigation options for the site. The annual mean is expected to exceed but this is an annual mean which does not apply for schools because of the time spent here. Near the road, concentrations are high by A40 and they quickly and continually improve as they move towards back of site. Hourly mean is the relevant measure for the school. PM10 – annual should be fine but daily may exceed. Neither objectives apply.

The report recommended that filters are fitted in the new building – these filters only came out in the last couple of years and are state of the art. The new building design has incorporated all recommendations from the report and will have much better quality air than most places. Within the building, the air quality will be very good.

The predicted concentration are at 1.5m height but children are smaller. A recent study showed concentrations are lower near the ground so children experience less pollution than adults. The reason is because lot of pollution from vehicles so is hot and rises – the position on this is currently inconclusive and it is
Has anyone got any questions about air quality?

**Parent:** would it be better to play in local park or are children ok to play in playground? **Answer (Melanie):** They are not at risk in the playground.

**Parent:** What are the filtrations in this building (library) – **Answer (Melanie):** I don’t think any monitoring has been taken here – we can discuss this. **Damian:** We use a device to track within buildings as well as outside. **Post meeting note:** Melanie has suggested a means of monitoring the Nitrogen Dioxide levels within the classrooms and playground – we will implement these diffusion tubes and report back monthly to parents.

**Parent:** How are specific zones measured? **Answer (Melanie):** Nitrogen dioxide diffusion tubes. Cheaper but not as accurate. Also put next to automatic measures to check for consistency.

**Parent:** Are there any natural ways of reducing air pollution? **Answer (Melanie):** It can help particulate matter but not nitrogen dioxide which is a bigger worry. Did try a special paint but varied results.

**Parent:** Is there any filter system for the library. **Answer (Melanie):** The building is further back so doesn’t need state of art filters like new building but when updated a few years ago – filters were put in place.

**Parent:** I read a study around Shepherd’s Bush air quality, they said figures were three times higher than initially thought. **Answer (Melanie):** If you send this through, I can look at methodology and check consistency.

**Parent:** Will we get details about classroom data? **Answer (Lois):** Yes we can share this

**Parent:** Why is there a big difference in safe levels for schools compared to residential? **Answer (Melanie):** The objectives apply outside/the façade of the building. At home is where you spend majority of time. The other is when outside shopping or outside school.

**Parent:** I still don’t understand why they are different. **Answer (Melanie):** We are at home more than school and Indicative of windows being open at home. **Parent:** But windows open at school too.

**Parent:** What if mobile building open windows? **Answer: (Damian):** they are in the safer zone.

**Parent:** Despite the levels being too high, do you think they are safe? **Answer (Melanie):** Yes the children are safe based on the setup right now.

**Parent:** Will it improve with new build? **Answer (Melanie):** Yes, the filters are good.

**Parent:** Particles are collected by trees – we should do everything we can to improve situation before new build is created.

**Parent:** Reception playground seems nearest A40 – is that sensible? **Answer (Melanie):** we were looking at that and we were discussing it. **Parent:** Especially as outside more than other children.

**Parent:** we were the 23rd highest in all of London schools. **Answer (Melanie):** I saw that too. Ideally we would have no emissions, the annual mean is high - this was what was included in the report – but the hourly mean is applicable here for the school. Hopefully improvements as well going forward.
Damian: Let’s move onto buildings. Hand over to Jenny.

Jenny: Thank you. Unfortunately, we have recently discovered that there will be another delay to construction of new building programme. During summer, the building contractors began their ground works on site and while digging exposed the capping to the main power cable, which powers most of this part of London. The cable/capping position is not in line with UKPN’s as built drawings—different position. We are having to redesign parts of the building as a result.

Initially, the worst case scenario was that the building may not have been able to be built. However, on 15th/16th September, UKPN came to site and confirmed position of capping/cable. We can now confirm that we are able to redesign the foundations of the building to enable to building to be built. Furthermore, following conversation with planners, we don’t expect to need to go through a full planning application again. We expect a likely delay of about a school term to the construction programme. We are making every effort to mitigate this delay as much as possible. All children currently at Conway will remain in on site and we are investigating alternative accommodation options for the 2017/18 Reception children for that potential term delay next year.

Damian: We have known for 2/3 weeks. Lois and I discussed immediately with Ark. We think it isn’t fair for current children to experience more difficulties. It will be easier for Reception pupils to transition once. We are thinking ahead for how best to assist with those Reception pupils with siblings too We don’t currently have a site yet but we are thinking ahead and wanted to tell you now rather than waiting for final options.

Julia: I am from the Education Funding Agency and have been involved since the start in 2011. I know how hard this project has been. The school is wonderful. I am hoping that we can make the best possible solution. I want to reassure you that we are doing everything we can to get children into this school in September.

Parent: Are you saying that whatever happens that you have the money? Answer (Julia): Our initial budget was £3,045,000. We have been given an extra £5 million.

Parent: How are you confident that foundations can be redesigned? Answer (Julia): We have already done that check.

Parent: Overall timeline, what is the biggest bureaucratic blocker? Answer (Julia): funding – 3 week process.

Parent: Are council aware? Answer (Julia): Yes, we are in constant conversation with the council as we are fund the council who pay contractor. John: we have to go through statutory process for planning as well. Julia: We do this in parallel to ensure communication.

John: Planners are aware that we have this issue, expecting us to submit plans to them so it won’t be a surprise. Julia: We can’t present further information yet.

Damian: Hand over to Chris

Chris (with PowerPoint presentation attached): We have an approved planning design. This plan shows ground floor, we’ve known that we need to avoid cables – planned tunnel/corridor so that people can access cable.

This was the recorded position of cable. Building designed around info from UKPN. As Julie said, the position cable was identified on site that we weren’t aware of - it was the extra high voltage cable and not where we planned. UKPN records don’t match up with the site and the capping/cable is
nearer to A40 than expected. This has an effect on building on ground floor layout and the sub structure.

Why this is an issue: UKPN still need to access cable at all times so we are unable to build over it – we will need to amend the design of the building to suit the new found cable position.

**Parent:** UKPN should pay for new build!

**Chris:** Our priority is to get project going ahead as quickly as position. New map of cable, now it overlaps ground floor plan.

Image shows position of trenches, which UKPN dug on site following the new discovery – this informs the drawings and we are able to confirm the actual position of the cable.

Next image – impact on ground floor building design. We lose some area from the north side of the building but on the south side, there is area for potential expansion based on new position of cable to redesign building. Moving area from north block to south block.

Next steps: Partial redesign of building. Update planning consent. We have been engaging with planners since first day this was known. Can be dealt with as amendment to existing plans rather than restarting. Working with contractor to see how we can increase speed/alternative construction methods. We are pushing for all mitigation methods to pull back from December 2017 to as close to September 2017 as possible.

**Damian:** We are sharing December as the official date but doing everything to get a September completion.

**Parent:** I know that those things don’t happen overnight. Are we losing 35% of building? **Answer (Chris):** only of the ground floor – the top floor remains the same and the full envelope of the building remains the same.

**Parent:** I would want to know the building programme day by day, week by week. Do you have one?

**Answer (Julia):** This is such a small building so we can do it if we are planning by just after Christmas. We have built two form entry primaries more quickly and we will keep you posted with key milestones as they are confirmed but the goal now is to get out of the ground by the end of the year.

**Answer (John):** Going back to your comment about UKPN. It was originally hard to know who to communicate with years ago but now we know and legal easements in place.

**Parent:** Is it too complex to sue them? **Answer (Julia):** We are building over their cables. Their point of view is that it is our risk to build over their area.

**Parent:** They have obligation to cooperate. **Answer (Julia):** They have co-operated.

**Chris:** UKPN are working with us now. We have a good relationship.

**Parent:** When is check happening on cable? **Answer (Chris):** Happened already.

**Parent:** Did anyone foresee any other events with building. **Answer (Julia):** It will be a relief when ground work ends.

**Parent:** Are there doors onto A40? **Answer:** No, all a wall.

**Damian:** We are looking to move plant rooms rather than whole classrooms when we make changes.
**Parent:** Is the air pollution still ok with new plans? **Answer (Chris):** This will not affect air pollution, the wall will still be here and we can build that.

**Damian:** In terms of teaching space there is no loss.

**Parent:** To be clear, is it one term of delay – nothing else? **Answer (Julia):** subject to any other surprises.

**Parent:** Are you looking at St Katherine’s. **Answer (Damian):** Exploring that and everything else.

**Parent:** Can you say for certain that it can be covered by planning amendment? This has happened before. **Answer (John):** Our informal conversations with planners have advised us that we don’t have issue a full planning application for the changes to the building. We can’t say with absolute certainty but all implications say it will be ok when we described potential design.

**Parent:** Those changes seem more radical than last time. **Answer (Julia):** only ground floor changes. We will show planners how it is as similar as possible. **Chris:** Overall footprint will be the same in terms of materials, appearance.

**Parent:** When construction starts will you change fence height? **Chris:** Risk assessment taking place linked to dust on site – includes washing vehicles’ wheels. **Parent:** Fence not high enough. **Chris:** I will check but fence will stay at same height.

**Parent:** Why couldn’t we revisit moving closer to A40 and create an ideal building. **Julia:** It’s TfL that has said no to closing lanes on the A40.

**Parent:** New redesign – are we fully mitigating air pollution so doesn’t become a wind tunnel and suck air from A40? **Answer (Melanie):** We are parallel to A40 so risk will be minimised. The model assumed no barriers. **(Damian):** We can do our best at school to collect data too. **John:** If necessary, UKPN would need access without damaging building so we need that tunnel.

**Damian:** We will check reception playground again too.

**Parent:** Has the school thought about moving elsewhere? **Answer (Damian):** I have no regrets about Ark Conway as a school, as a building it has been challenging. This was the only place in local area when Emily started this before Ark came in. **(Emily):** Council suggested this location. **Julia:** We have checked, there are no other areas. **Parent:** What is the cost of the build compared to other primary schools? **Julia:** It’s pupil places that this school has given, not just down to money.

**Parent:** So because school is doing well it plays a part. **Julia:** Yes.

**Damian:** any further questions, please come and ask the team.