

14th March 2022

Didsbury High School

Response to WDRAs concerns

“As discussed on site with Ed, here are the issues raised by the 4 local residents and the local residents' group WDRA:

- *Noise from balls on fencing carrying into residential spaces*
- *Concerns regarding intensification of use and potentially more traffic*
- *Existing acoustic fence has not helped*
- *Where will children play at break time (when not playing football/rugby)?*
- *Could the school not use Hough End instead, like other local schools?*
- *A hybrid pitch should be considered instead*
- *Carbon footprint of proposal, how will it be disposed of at the end of its life?*
- *Health and pollution implications of toxic rubber crumb infill - asked that organic cork be used instead*
- *Loss of habitat/foraging for hedgehogs, birds, insects*
- *Hedgerow habitat around the site perimeter should be planted/greatly enhanced in an attempt at damage limitation*

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McArdle Sport-Tec (the appointed Contractor) in conjunction with the Client (The Laurus Trust) have prepared this report to respond to the above concerns raised by local residents' group WDRA.

1. Noise from balls on fencing carrying into residential spaces

All fencing surrounding the new AGP will be fitted with acoustic washers – this is a standard practise for AGPs. Please see below excerpt from independent acoustic consultants:

The most significant impact noise is generated by the vibrating panel rattling against the post when the panel is struck by the ball. The fence comprises welded mesh panels fixed between metal uprights. A neoprene washer is located between the panel and the post to reduce this rattling. The image below shows an example of the fixing between panel and post with the washer in place. It is proposed that the same fixing method, including the washer is used at the proposed site.

Figure 1: Image showing neoprene isolators



The typical level of a loud ball impact is around 66-70 dB L_{Amax} at 20 metres.

To determine the possible reduction of an acoustic fence noise modelling has been undertaken using noise mapping software Cadna:A by DataKustik. This uses the calculation method of ISO 9613 to predict noise levels.

The predicted highest maximum noise level from the highest individual source location is in the order of 61 dB $L_{Amax(fast)}$ at the façade of the nearby noise sensitive residential property.

2. Concerns regarding intensification of use and potentially more traffic

There will be no additional traffic, as it will be used for school and extra-curricular activities only, in the same way the existing grass pitch is used currently.

The only 'intensification' will be during school hours only, as currently the existing grass pitch cannot be played on throughout the school year.

3. Existing acoustic fence has not helped

The acoustic fencing installed was put in after a full Acoustic Survey was completed by Clement Acoustics Ltd who were commissioned by Mace Group as part of the original school construction. The design was agreed by planners as a suitable acoustic fence in the first instance and nothing has changed. Whilst the fencing surrounding the current MUGA is not fully acoustically protected because we are reliant on the timber acoustic fencing agreed by environmental health, the new 3G fencing, will have rubber cushions fitted to the clamps to prevent large impact noise transfer as well as neoprene strips fitted to the area around the bars on the goal surrounds to improve this even more. What we need to remember here is that no change in use is occurring, so we are only using the facility for students aged 11-18 and within the permitted hours as agreed on the original planning approval. What we are ensuring by this work is that all students can always access the PE curriculum, where at present this isn't possible due to weather conditions and the muddy grass surface.

4. Where will children play at break time (when not playing football/rugby)?

The school currently has a large MUGA and large hardstanding areas, these areas are currently used by the students during break times.

5. *Could the school not use Hough End instead, like other local schools?*

Logistically this is not feasible, allocated lesson times are 55 minutes, getting changed takes between 5-10 minutes, walking to Hough End with a large group takes 10-15 minutes each way. Our curriculum will suffer if the grass pitch isn't approved. We want to keep our students on site as much as we possibly can for numerous reasons, including safeguarding.

6. *A hybrid pitch should be considered instead*

Hybrid pitches are not designed for school environments, requiring significant amount of maintenance which would need to be done outside of school hours, maintenance will be with mostly 'noisy' plant and tractors as well as a full irrigation system.

7. *Carbon footprint of proposal, how will it be disposed of at the end of its life?*

Please find attached McArdle Sport-Tec's Environmental Manual.

Please review McArdle Sport-Tec's recycling statement:

The issue of redundant carpet recycling will become a bigger issue to be addressed. Presently, many carpets will go to landfill or incineration as a solution, neither of which is considered desirable. As an accredited ISO 14001 organisation, we have led the way in finding environmentally friendly alternatives to current practice and already offer or are developing new solutions for the environmental aspects associated with our products and associated business activities.

In support of our Environmental Objectives, we have invested extensively in Research and Development of sustainable solutions for sports fields and recycling of artificial turf which are designed to be fully compliant with all applicable environmental legislation and EU Directives, as detailed within our legal register.

Upcycling

In accordance with the waste hierarchy, the most desirable option for a redundant carpet is to be able to create something new and useful from the material element contained in the construction of the artificial grass. Our partner organisation has created new engineering processes that allows for turf to be

consumed in the manufacture of other products which serve useful functions both within and outside of the sports industry.

Raw material reclamation

When carpet is removed from site, we have formed a partnership with a specialist contractor that from early 2020 will be able to extract sand and rubber infill and reprocess ready for reuse. The recycled infill is independently tested by a sports test house and is fully endorsed for reuse in our installations. This can deliver cost savings as well as offering a genuine solution to infill disposal. The remaining cleaned carpet can then be upcycled.

Repurposing

In some instances when an artificial surface system is considered as redundant, it is sometimes possible to salvage a certain quantity of the carpet which could be then reinstalled at a different community facility in the form of a small sided MUGA area. At present we are unaware of any organisation that has repurposed old 3G systems in this manner.

8. Health and pollution implications of toxic rubber crumb infill - asked that organic cork be used instead

Please review SAPCA's (Sport and Play Construction Association) position on rubber in-fill for artificial turf pitches.

"POSITION STATEMENT ON 3G PITCHES

This position statement is the result of a collaboration between key stakeholders, including SAPCA, in response to questions and concerns regarding 'third generation' (3G) artificial grass pitches

"Third generation or 3G artificial grass pitches are recognised as durable, safe, year-round playing surfaces, able to withstand intensive use and all kinds of weather. They mean more people can benefit from all the associated social and health benefits of physical activity.

"Concerns have, however, been raised about the safety associated with these pitches and their constituent parts, most commonly the presence of rubber crumb. We take these concerns very seriously.

"We have monitored numerous independent scientific studies on this issue, which have reported a very low/negligible level of concern for human health as a result of 3G pitches and rubber crumb.

“Indeed, the European Chemicals Agency has recently published its own findings, following an extensive EU-wide study, and has found no reason to advise people against playing sport on 3G pitches with rubber crumb.

“The Sports and Play Construction Association, the UK trade body for the sports pitch industry, has developed a voluntary industry standard that will provide minimum requirements that go above and beyond what is currently required for rubber crumb under European regulation. Sport England and leading sport governing bodies all support this approach and will continue to work with the industry to provide reassurance that pitches in this country are safe.””

Cork in-fill is not a suitable or viable alternative for artificial turf pitches at present.

- a. Cork in-fill although viewed as a sustainable product is not renewable at present, demand for the product outside of the sports industry far outweighs supply.
- b. Cork’s bulk density is far less than SBR in-fill, this means that the cork is very mobile and is blown off the pitch or washed off the pitch.
- c. Cork requires significantly more maintenance, this maintenance will need to occur outside of school hours, which will be a nuisance to neighbours.
- d. Cork’s lifetime is only 3 to 4 years, requiring removal to landfill as the cork breaks down to dust or becomes ‘crusty’ which is unsuitable for any form of recycling.

9. Loss of habitat/foraging for hedgehogs, birds, insects & Hedgerow habitat around the site perimeter should be planted/greatly enhanced in an attempt at damage limitation

The school is open to biodiversity enhancement measures – this can be included as a pre-use condition and agreed with all parties prior to first use of the pitch.

Yours faithfully
McArdle Sport-Tec Ltd

Tom Fearn
Estimator