Bentley Archers CC – an assessment of foreign objects in the surface of the outfield

December 2025

Limitations of this report

Any recommendations contained within this report are not a specification of works, nor can they be guaranteed to fully correct any issues or concerns found.

Introduction

The outfield at Bentley Archers CC has not been used for winter sports due to an issue with glass being found in the top-dressing sand after it was applied following recent re-grading works. Though the site was handpicked on discovery of the glass there is ongoing concern that the glass remains and poses a risk to users. This assessment was commissioned to identify how widespread the issue is and whether there are hotspots of glass and sharps within the outfield.

Methodology

The outfield was divided into a grid and the grid was walked with samples taken at the approximate locations shown in Figure 1.

Each sample was taken with a soil corer with the depth of sample limited to the upper 100 mm where the glass contaminated sand is located. Thirty six 50 mm diameter x 100 mm deep soil samples were taken across the site and each core was separated by hand to identify any sharps by sight and feel. Where sharp objects were found, the length of the objects longest axis was noted.

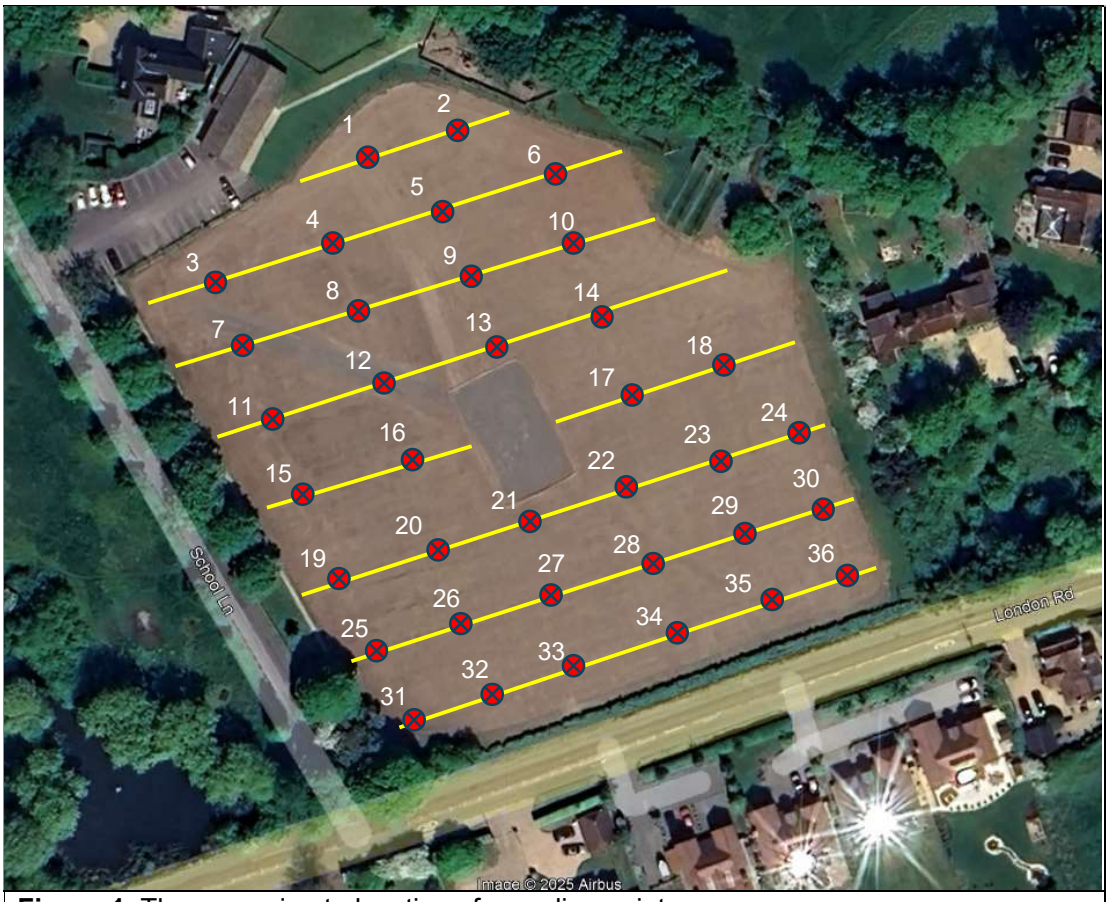

Figure 1. The approximate location of sampling points

Notes: It is acknowledged that 36 sample points over an area of around 1.2 ha is a very coarse sampling grid however to be affordable for the club field work had to be restricted to 1 working day. All results must be interpreted in the light of this.

Results

1. Of the 36 samples taken 11 items were found in the upper 100 mm, with multiple objects found at some points. These included:
    a. Point 8 – a single 10 mm stone.
    b. Point 16 – a 10 mm diameter flint, a 10 mm rounded stone and a 5 mm piece of plastic.
    c. Point 18 – a 10 mm stone.
    d. Point 21 – a 5 mm stone and an 8 mm stone.
    e. Point 23 – a 3mm piece of rounded glass and a 5 mm stone.
    f. Point 29 – a 5 mm stone.
    g. Point 30 – a 3 mm flint.

There is no clear pattern to the distribution of objects though there is a slight indication that more stone is present to the east of the site. It is common for multiple stones to be found in one location if the site has been stone picked / buried as the machinery tends to concentrate stones in specific areas depending on how the machine is set up and its mode of operation and whether the site was power-raked after stone treatment.

Of the objects found only one glass fragment was found and this was rounded glass and was not a safety risk. None of the objects found are likely to be a safety risk due to the small size and limited amount of material in the soil. The GMA consider any stone over 25 mm in any dimension in the upper 50 mm of topsoil to be a safety hazard. The latest Sport England guidance has reduced this to 20 mm in any dimension but even with this tighter requirement none of the material found in this survey would be deemed to be dangerous. Photos of the objects found are presented in Figures 2 – 9.

2. It was noted that areas to the north and west of the site were wetter than elsewhere and were holding a little water. In addition, there was a little more thatch in these areas due to the wetter soil conditions. These areas should be monitored and scarified / harrowed to reduce thatch levels if thatch continues to build up.

Conclusions and recommendations

Based on the results of the survey no objects were found that would present a safety risk to users, however as noted previously, the scale and intensity of the survey was necessarily limited, and the results cannot guarantee that there is no dangerous sharp glass or stone elsewhere within the upper 50 mm of the topsoil within the site. As a result, the GMA cannot declare the site is safe for use, but it is suggested that based on this assessment alone, the risk would appear to be low and any contamination of the topsoil with glass is likely to be limited.

Of course, it only takes one sharp piece of glass to result in an injury to a player, but most sports fields will contain some stone or sharp objects that could potentially result in a similar injury and in that sense this playing field may not be any more dangerous than many other similar playing fields. **How the club wishes to proceed rather depends on their appetite for risk as any injuries sustained from glass in the soil would be at the risk of the club and as it is a known risk such risk may not be covered by the club's insurance, though the club should confirm this by consulting their insurers.**

Should the club decide to use the field in its current condition, the pitches should be carefully inspected before each game, especially in any worn areas and any potentially dangerous objects should be removed before play takes place.

To remove the risk, two options are available to the club.

Option 1: The whole cover of grass and the depth of applied top-dressing sand which had glass in it would need to be removed mechanically, a new layer of suitable sports sand / rootzone placed and the site re-seeded and grown in again. This is likely to take at least 12 months for the site to be ready to use assuming work is done in summer 2026. The cost is also likely to be high, estimated at around **£45 - £55 k ex VAT** (inclusive of mobilization and grow-in maintenance costs).

Option 2: Over the next 12 – 14 months regular top-dressing of the site can be carried out by applying 5 mm depth of a compatible sports sand / rootzone a minimum of 4 times to create a clean layer of suitable sand / rootzone. The application of additional sand / rootzone would need to be done when the grass is growing strongly and the surface is dry. Realistically this cannot begin until April at the earliest. There should be approximately 6 – 8 weeks of active growth between each application and the sand / rootzone will need to be brushed into the sward in at least three directions to work it into the base of the sward and allow the grass to grow through it and fully recover before the next application. Applying too much in one go will risk burying the grass and killing it off. Over time the risk will progressively reduce as clean material covers any remaining glass or sharp material. The cost of 4 operations to apply a 5 mm depth of and over the outfield is likely to be in the region of **£5 - £6 k per application (£20 - £28 k ex VAT for the full 4 applications**).

Care will be needed to ensure sand / rootzone is not spread over the cricket square.

In future the risk will continue to reduce as worm action further buries any glass over time but this is a long process.

Figure 2. Small flint at Point 30

Figure 3. 5 mm stone at Point 29.

Figure 4. 3 mm rounded glass at Point 23

Figure 5. 5 mm stone at Point 23

Figure 6. 5 mm stone and 8 mm stone at Point 21

Figure 7. 10 mm flint, 10 mm stone and plastic at Point 16

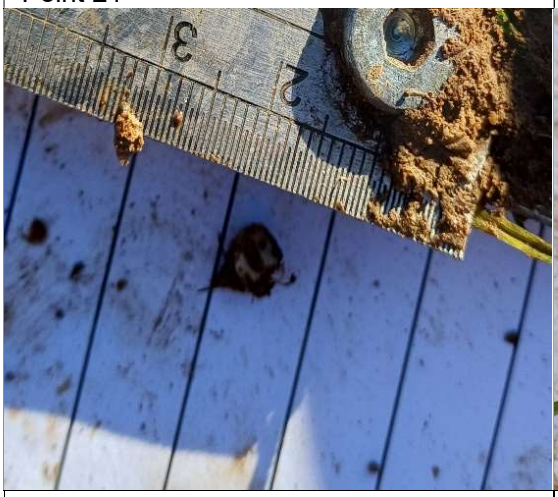

Figure 8. 10 mm stone at Point 18

Figure 9. 10 mm stone at Point 8