

**WEST DIDSBURY & CHORLTON AFC, BROOKBURN ROAD, CHORLTON CUM HARDY:
PA SYSTEM NOISE MANAGEMENT PLAN**

On behalf of:

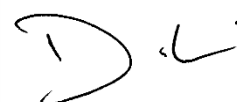
West Didsbury & Chorlton AFC

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PA SYSTEM NOISE MANAGEMENT PLAN**

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On behalf of:
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1.0 REVISION SCHEDULE

1.1 Details of revisions to this noise management plan are set out below:

Revision	Date	Name/company	Details of revisions
V01	03/12/21	Donald Quinn, Hepworth Acoustics	Initial version
V02	04/05/22	Donald Quinn, Hepworth Acoustics	Updated to reflect updated PA system and system noise levels

Add additional lines as necessary

2.0 INTRODUCTION

2.1 This noise management plan has been prepared by Hepworth Acoustics Ltd, on behalf of West Didsbury & Chorlton AFC, in connection with Condition 6 of planning approval (ref. 124335/JO/2019) which states:

6. 'Within three months of the date of this permission a scheme shall be submitted to and approved in writing for the management and control of noise levels from the public address system. The scheme should be designed to manage and control the noise levels of the public address system. The approved scheme shall be implemented as part of the development and maintained thereafter'

2.2 The noise management plan (NMP) outlines the methods by which West Didsbury & Chorlton AFC will systematically minimise the potential impact of noise from use of the PA system at their Brookburn Road football ground on the nearby dwellings.

2.3 The NMP is a working document with the aim of ensuring that:

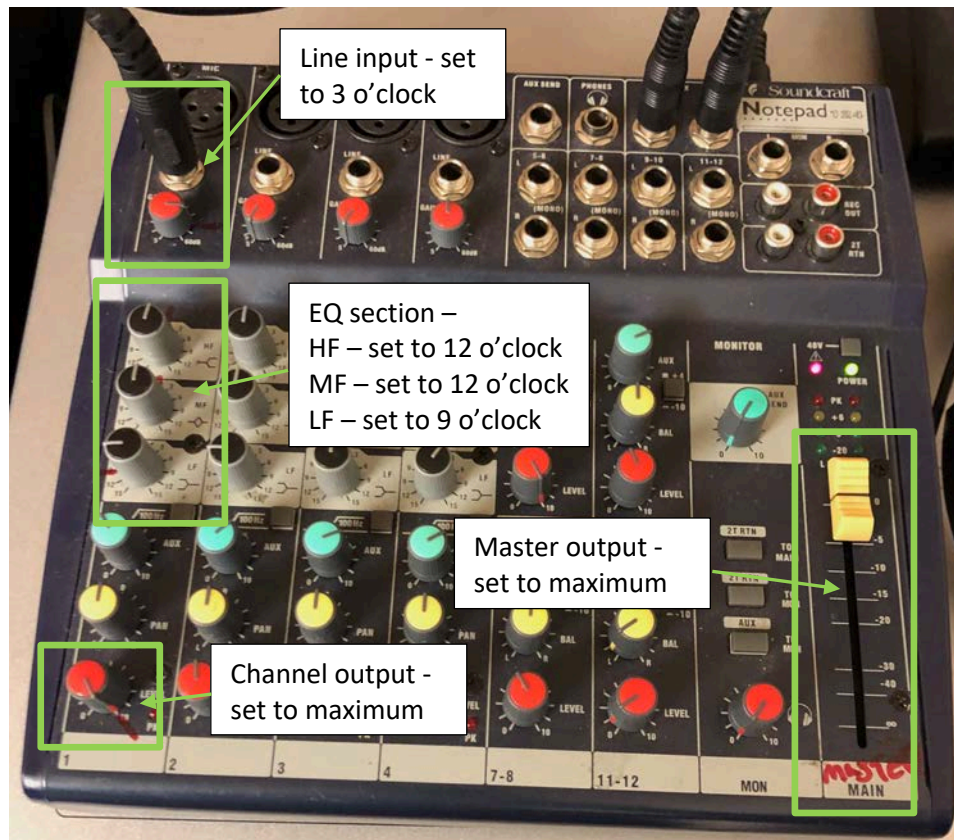
- Noise impact from operation of the PA system is minimised as far as is practicable;
- Control of potential noise impact is considered as part of routine operation of the PA system;
- Any complaints about noise from the PA system are dealt with in a timely and effective manner; and
- Any changes to the PA system are such that there is no additional noise or, ideally, a reduction in noise associated with its operation.

2.4 This NMP addresses the control measures employed to minimise noise impact. These measures are supported through review of complaints should they arise. The complaints management procedure, including the associated management responsibilities, is also addressed.

3.0 DESCRIPTION OF PA SYSTEM & ASSOCIATED NOISE LEVELS

PA System Description

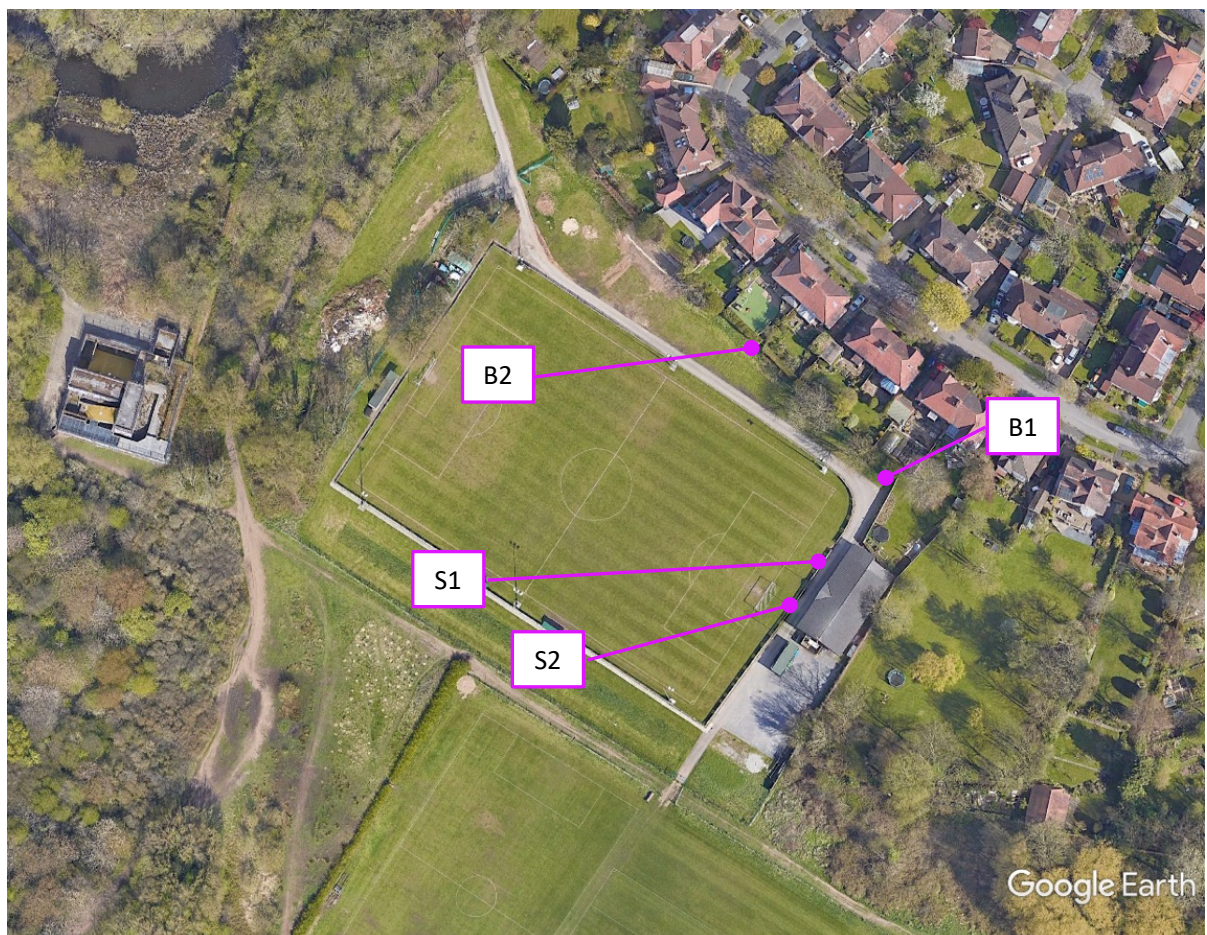
- 3.1 The PA system used at the club comprises a radio microphone (and receiver) connected to a small audio mixer (on which input and output levels and EQ are set) which is then fed into a power amplifier serving two small external loudspeakers mounted under the canopy of the club house exterior terrace. The PA system is used for spoken word announcements to announce the teams prior to each match and for other housekeeping/management announcements before each match, at half time and, where necessary, immediately following the match. The announcer would typically be outside on the external terrace when making the announcements.
- 3.2 Part of the commissioning of the new PA system involved setting the input, output and EQ levels on the mixer for optimal use. Whilst the mixer has a total of 12 channels, only a single channel (channel 1) is used.
- 3.3 The settings are marked onto the mixer (in red) as shown below:



- 3.4 It is noted that increasing the input levels and EQ values significantly beyond the marked settings results in undesirable and unpleasant feedback if the microphone is used outside.

PA System Noise Levels

- 3.5 Because the PA system is used only for spoken word announcements, noise levels will be inherently variable to some degree. However, for the purposes of quantifying typical PA system noise levels, a series of noise measurements have been carried out under controlled conditions.
- 3.6 The noise measurements were carried out during the morning of Friday 29 April 2022 using a B&K 2250 'Class 1' sound analyser (serial no. 3011706) that was field-calibrated before and after the measurements with no variance observed. For all measurements, the sound analyser was mounted onto a tripod at a microphone height of approximately 1.4m above local ground level. The weather during the measurements was mild, partially overcast, dry and generally calm. During the noise measurements, the residual noise climate at the site was fairly low such that none of the measurements of PA system noise were significantly affected by extraneous noise.
- 3.7 The noise measurements were carried out at four separate locations as indicated below:



- 3.8 Locations S1 and S2 were directly in front of each of the PA system loudspeakers, with the tripod immediately in front of the terrace wall as indicated below:



- 3.9 The noise measurements were carried out with the announcer reading repeatedly from the same team sheet, with the noise measurements taken over the same approximately 50 second duration of the announcement at each of the measurement locations.
- 3.10 The measured noise levels in terms of average $L_{Aeq,T}$ were as follows:

Table 1: Measured PA system noise levels

Location	Measured noise levels in dB $L_{Aeq,T}$
S1 – left hand loudspeaker	77
S2 – right hand loudspeaker	75
B1 – at site boundary in corner	56
B2 – at site boundary near halfway line	49

- 3.11 Close-up to the loudspeakers, average noise levels during announcements are therefore around 75 – 77 dB $L_{Aeq,T}$. Corresponding noise levels at the boundary of the site with the nearest dwellings were 56 dB $L_{Aeq,T}$ in the corner (i.e. nearest the clubhouse and loudspeakers), reducing to 49 dB $L_{Aeq,T}$ towards the halfway line.
- 3.12 It is important to note that the PA system will typically only be used for approximately five minutes prior to kick-off and then for a short period (again no more than around five minutes) at half time, and then again if necessary for no more than five minutes at the end of a game. This means that announcements will occur for no more than ten minutes in any given hour.
- 3.13 Even if it is assumed that the announcements involve continuous speaking, the corresponding overall average one-hour noise level at the boundary of the site with the nearest dwellings will be no more than around 48 dB $L_{Aeq,1hour}$. This is 3 dB below the typical residual noise level measured previously at the site during a weekday evening period on a non-matchday of 51 dB L_{Aeq} (as noted in Table 1 of Hepworth Acoustics report ref. P19-459-R01v1 dated February 2019).
- 3.14 It is therefore concluded that subject to the PA system being used as described in this noise management plan, and with the mixer settings as highlighted above, there will be no unacceptable PA system noise impact.

4.0 NOISE CONTROL MEASURES

Operational & Management Measures

4.1 The following operational/management measures are to be used to minimise noise from the PA system:

- The PA system is to be used for spoken word announcements only. No music will be played through the PA system;
- The PA system is to be used to announce the teams prior to each match and for other housekeeping/management announcements before each match, during the match, at half time and, where necessary, immediately following the match. The PA system will not be used outside of these periods except in an emergency; and
- The club chairman/secretary will have full responsibility for control of noise emissions from the PA system;

Physical Measures

4.2 The following physical measures are already in place and will assist in minimising the noise from the PA system outside the nearest dwellings:

- The PA system is of modest size and power, with only two loudspeakers located under the canopy on the front elevation of the club house;
- The loudspeakers are orientated directly towards the supporters and pitch (i.e. not orientated towards the dwellings); and
- The optimal settings for the PA system output are clearly marked on the mixer to ensure that the correct settings are used at all times.

4.3 If any changes to the PA system are proposed, the following design factors will be prioritised:

- Any new/additional PA system loudspeakers should be installed only with a view to reducing the overall level at which each loudspeaker needs to operate (e.g. the existing loudspeakers are currently used to make announcements for home supporters close to the club house, but also to

away supporters at the far end of the ground. Any new loudspeakers could be installed near to the away fans such that the existing loudspeakers could be turned down).

- Any new/additional loudspeakers should be oriented away from dwellings wherever practicable.

5.0 NOISE COMPLAINT PROCEDURE

Receipt & Investigation of Noise Complaints

5.1 Reasonable complaints regarding noise from the PA system will be dealt with as follows:

- The club chairman or secretary will be responsible for dealing with any complaints regarding noise from the PA system, received directly from local residents or via the Local Authority Environmental Health Department;
- All available details of the complaint will be recorded in Section 5 of this noise management plan by the club Chairman/Secretary;
- The club Chairman/Secretary will be responsible for recording and acting upon the complaint;
- In the first instance, the club Chairman/Secretary will be responsible for ensuring it is investigated as soon as possible, ideally when the PA system is next in use on the next matchday. This will involve a site walk-over to identify any obvious sources of excessive noise which have prompted the complaint;
- The Chairman/Secretary will be responsible for responding to the complaint and informing the complainant and/or Local Authority Environmental Health Department of any immediate remedial action taken within one working day of receipt of the complaint;
- Where short-term remedial action is not effective; short-term remedial action is not feasible; or West Didsbury & Chorlton are unable to identify the reason for the excess noise, then in the first instance the club Chairman/Secretary will arrange, where access is available, to make a visit to the resident's property to witness the noise;
- Where PA system noise is found to be excessive by the club Chairman/secretary, a bespoke plan of action will be instigated to identify and take action to minimise the source/reason of the noise. Any such plan of action will be shared with resident/LA where appropriate, recorded in the table (see Section 5) and implemented by West Didsbury & Chorlton AFC within 28 days.

6.0 RECORD OF NOISE COMPLAINTS

6.1 Complaints regarding noise from PA system are to be recorded in the following table:

Ref.				
1	Date	Time	Complaint from (name):	WD&C AFC contact (name):
	Details of complaint:		Result of investigation/action taken:	
2	Date	Time	Complaint from:	WD&C AFC contact
	Details of complaint:		Result of investigation/action taken	
3	Date	Time	Complaint from:	WD&C AFC contact
	Details of complaint:		Result of investigation/action taken:	

Ref.				
4	Date	Time	Complaint from:	WD&C AFC contact:
	Details of complaint:		Result of investigation/action taken:	
5	Date	Time	Complaint from:	WD&C AFC contact:
	Details of complaint:		Result of investigation/action taken:	
6	Date	Time	Complaint from:	WD&C AFC contact:
	Details of complaint:		Result of investigation/action taken:	

Add additional entries as necessary.

7.0 MANAGEMENT RESPONSIBILITIES AND REVIEW

- 7.1 The control of noise from PA system will be managed in accordance with Section 3 of this plan.
- 7.2 It will be the responsibility of the club Chairman/Secretary to ensure that all appropriate steps are taken to ensure that noise from the PA system is minimised and for the requirements of this noise management plan to be met.
- 7.3 The club Chairman and Secretary will be supported by the staff and volunteers at the club.

Review of Control Measures

- 7.4 Noise control measures will be reviewed annually or as frequently as may be necessary through internal audits as part of any subsequent complaints and associated remedial measures.