

Project Note

Project North Stand Project, Etihad Stadium
Subject MCC Comments on ES Noise Chapter (2)
Project no 053810-0820-1
Date 26 June 2023

Revision	Description	Issued by	Date	Approved
P02	Second issue – correction in Table 3-2	CG	26/06/2023	AT

1 Introduction

Comments have been received from Manchester City Council (MCC) relating to the ES Noise Chapter submitted as part of the planning application for the North Stand Project at the Etihad Stadium in Manchester (MCC planning ref. 136763/FO/2023).

This project note addresses the following of the comments received:

Noise

3. Addendum reports will need to be required for the commercial units, flexible event space, hotel etc with regards to mitigation measures to control noise break out

Plant

1. Section 11.60 of the report says that the consultants have used Modal values instead of the arithmetic average for background noise levels. The predicted noise levels all look ok based on the modal background noise level, but in order to comply with our guidance, they will need to recalculate their background noise levels.

2 Addendum Reports

Following a call with Laura Miller of MCC's Environmental Health department on Tuesday 20th June 2023, it is understood that the addendum reports mentioned in the comments would be required via planning condition when sufficient details of the relevant operations are known. They are not required as part of the planning submission.

3 Background Sound Levels

As stated in paragraph 11.60 of the ES noise chapter, the existing typical background sound levels (dB LA90,T) at the receptors for the day (07:00 – 23:00) and night-time (23:00 – 07:00) periods were defined as the most frequently occurring measured (i.e., as part of the baseline noise survey) 15 minute level during the day and night-time periods following the guidance from BS 4142:2014+A1:2019.

The MCC's technical guidance "Planning and Noise" provides an alternative method of calculating the typical background sound level for a given period. Using the results of the baseline noise survey, typical background sound levels using the MCC method have been calculated and are presented in Table 3—1 below.

Table 3—1 Typical background sound levels at receptors calculated using MCC method

Receptor	Typical background sound level – MCC method (dB L _{A90,15min})*	
	Daytime (07:00 – 23:00)	Night-time (23:00 – 07:00)
R1: 6 Cromarty Walk	48	48
R2: 12 Biscay Close		
R3-R4: The Cube	52	41
R5-R6: The Drum		
* Typical background sound levels based on measurements undertaken at 2 m above ground level		

The typical background sound levels in Table 3—1 are 4 to 5 dB lower than those presented in Table 11.8 of the ES noise chapter for the daytime period, and 1 dB lower for the night-time period.

The primary purpose of calculating the typical background sound levels is to define target noise rating levels for noise emissions from proposed external fixed buildings services plant at the receptors (see paragraphs 11.84 to 11.86 of the ES noise chapter). Using the same methodology as described in the ES noise chapter, the following target noise rating levels have been calculated using the data presented in Table 3—1, as follows:

Table 3—2 Target noise levels for external fixed plant at receptors using MCC method

Receptor	Target plant noise rating level – MCC method (dB L _{Ar,Tr})*	
	Daytime (07:00 – 23:00), Tr = 1 hr	Night-time (23:00 – 07:00), Tr = 15 mins
R1: 6 Cromarty Walk	43	43
R2: 12 Biscay Close		
R3-R4: The Cube	47	36
R5-R6: The Drum		
* Typical background sound levels based on measurements undertaken at 2 m above ground level		

As the target noise levels are set at 5 dB below the existing typical background sound levels, the values in Table 3—2 are also 4 to 5 dB lower during the daytime and 1 dB lower during the night-time than the corresponding values presented in Table 11.15 of the ES noise chapter.

Further to the comments provided by MCC, the target plant noise rating levels for external plant presented in Table 3—2 should supersede those presented in Table 11.15 the ES noise chapter.