

Project Name: Land to the Northwest of Factory Road
 Project No. 332612492
 Document Title: Responses to Consultee Comments from EDC

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 Date: 14 November 2025

Introduction

A request was received from Ebbsfleet Development Corporation (EDC) on 14 November 2025, to provide updated rating levels for remaining scenarios following an update to the lathe operating parameters in Stantec technical note TN10 of 14 October 2025.

This document presents a summary table for the remaining scenarios which include lathe operation.

Appendix A includes the façade correction and lathe operating clarifications which were included in TN10, as they also apply to these scenarios.

Updated Scenario Noise Impact Assessment

Table 1 summarises the operating parameters assessed in the original Noise Impact Assessment report.

Table 1: Assessment Scenarios

Scenario	Assessed Sound Sources				Assessed Time Period	Comment
	Flat Bed Lorry Delivery	Transit Van Delivery	Lathe & Pillar Drill Use	Angle Grinder Use		
1	✗	✓	✓	✗	Weekday	Representative of typical operating conditions
2	✓	✗	✗	✗	Weekday	Expected to occur once a fortnight
3	✗	✗	✓	✗	Saturday	Expected to occur once a month as a worst case
4	✗	✓	✓	✓	Weekday	Expected to occur once every 3 months

Scenario 2 does not include lathe operation and is therefore not considered further within this document as the impact remains as previously quoted in the Noise Impact Assessment report.

Table 2 presents the results of the numerical impact assessment for remaining scenarios 1, 3 & 4, which include lathe operation.

Results are only presented for the worst-affected receptor located directly adjacent to the proposed workshop (Receptor A), as the impact at other receptors is reduced due to relative orientation and/or distance.

Reference: Land Northwest of Factory Road, Northfleet

Table 2: BS 4142:2014 Preliminary Assessment Results – Receptor A – Scenarios Including Lathe Operation

Description	Scenario		
	1	3	4
Calculated Rating Level at Receptor (dB $L_{Ar,1hr}$)	50	46	51
Background Sound Level (dB $L_{A90,15mins}$)	47	42	47
Excess of Rating over Background Sound Level (dB)	+3	+4	+4
Assessment of Impact	Indication of a less than adverse impact , depending on the context		

As noted in the table above, the cumulative impact of lathe operation and other typical activities, is expected to result in a less than adverse impact at the worst-affected receptor in all scenarios.

Appendix A TN10 Façade & Lathe Operating Clarifications

Application of Façade Corrections

Bureau Veritas note that façade corrections should either be applied to both the survey measurement results and the predicted rating levels to provide a like-for-like assessment at a location 1 m from the worst affected window, or to neither.

It is confirmed that rating levels in Table 4.7 and 4.8 include a 3 dB increase to allow for façade reflections at the assessment location (i.e. at 1 m from the worst-affected window).

The numerical assessment therefore presents a like-for-like comparison against the corrected background sound levels at 1 m from a façade.

Operating Parameters of the Future Workshop

Bureau Veritas has queried the operating parameters of the future workshop, stating that there is likely to be variation in the operation of the lathe that would mean that intermittency may be noticeable at the receptor and therefore an intermittency correction should be applied in the BS 4142:2104 assessment.

Whilst the Operator has confirmed that there are no pauses for “*adjustment of toolbits, pauses between cuts for adjustments and inspections, etc.*”, he has provided the following statement to further clarify operations in a typical hour reference period:

“I write the following statement to confirm the operations of the lathe to support the planning application for a new workshop at Land to the Northwest of Factory Road.

As already identified within the planning submission and accompanying noise assessment, the lathe is the most important tool as part of my business in making the graphite cylinders. The lathe is therefore turned on for most of the duration of the working day. When the lathe is in use it does not change speed, but each part is worked on for about 8 mins and then the lathe is switched off for about the same amount of time to switch it out for a new piece of material.

Typically, 4 cylinders will be made in an hour, roughly one per quarter of an hour. Some cylinders are larger and therefore it takes longer to produce those, so it does vary, but that’s typical.”

As noted above, the Operator has clarified that they produce a range of graphite cylinder sizes (workpiece), and each takes a slightly different amount of time on the lathe. The on-off cycle typically consists of 8 mins lathe run time and 8 mins stop time. On this basis, there are approximately 4 on-off cycles in a typical hour, with approximately 32 mins of ‘on’ time in any given hour.

Rating levels summarised in the following table have been corrected to reflect the typical lathe operating parameters above and include a 3 dB intermittency penalty and a 3 dB increase for the effect of façade reflections at the façade assessment location. Scenarios are presented for typical weekday and occasional Saturday operation of the lathe.

Reference: Land Northwest of Factory Road, Northfleet

Results are only presented for the worst-affected receptor located directly adjacent to the proposed workshop (Receptor A), as the impact at other receptors is reduced due to relative orientation and/or distance.

Table 1: BS 4142:2014 Preliminary Assessment Results – Receptor A – Lathe Operation Only

Description	Scenario	
	Weekday	Saturday Morning
Calculated Rating Level at Receptor (dB $L_{Ar,1hr}$)	46	
Background Sound Level (dB $L_{A90,15mins}$)	47	42
Excess of Rating over Background Sound Level (dB)	-1	+4
Assessment of Impact	Indication of a low impact , depending on the context	Indication of a less than adverse impact , depending on the context

As noted in the table above, lathe operation is expected to result in a low or less than adverse impact at the worst-affected receptor in both situations.

Whilst lathe operation is noted to have a higher impact on Saturday mornings due to lower background sound levels, it is still expected to be below the LOAEL and in the context of the workshop only being used very occasionally on Saturdays (“3 weekends in the past 52 weeks”), the overall noise impact is considered to be low.