

## Noise Constraint Study - Land East of Manor Trading Estate

### Consultation Response Details

Application Number	21/0532/OUT ( <a href="https://publicaccess.castlepoint.gov.uk/">https://publicaccess.castlepoint.gov.uk/</a> )
Site	Land East of Manor Trading Estate, Benfleet, Essex SS7 4PS
Proposal	Outline Planning Application Comprising of 68 Residential Units, Three Class E (Commercial, Business and Service) Units, One B2 (General Industrial) Unit and Two B8 (Storage and Distribution) Units with Associated Access, Parking, Amenity Space, Strategic Landscaping and Noise Attenuation. Restoration and Improvement of Existing Estate Roads and Infrastructure.
Case Officer	Philip Dash
Date of request from ECC	29 <sup>th</sup> June 2021
Date of response	14 <sup>th</sup> July 2021
Jacobs Ref	B3553P13/73
Jacobs Consultee	Humphrey Roberts-Powell
Information reviewed	<ul style="list-style-type: none"> <li>• Integrated Acoustics Ltd - Noise Constraint Study to Proposed Residential Development, July 2020</li> <li>• Development Masterplan - NC18.442-P203</li> <li>• Planning Design and Access Statement</li> </ul>

This response provides advice to Essex County Council in their capacity as Statutory Consultee. The existing use of Benfleet Scrap, which is adjacent to the proposed development, is safeguarded through the Essex and Southend-on-Sea Waste Local Plan.

### Policy and Guidance

#### National Planning Policy Framework

The revised National Planning Policy Framework (NPPF) published in July 2018 (last updated in June 2019) introduced the 'agent of change' principle into the legislative framework, which is as follows:

*Existing businesses and facilities should not have unreasonable restrictions placed on them as a result of development permitted after they were established. Where the operation of an existing business or community facility could have a significant adverse effect on new development (including changes of use) in its vicinity, the applicant (or 'agent of change') should be required to provide suitable mitigation before the development has been completed.*

#### National Planning Practice Guidance

Further guidance in relation to new noise sensitive development near existing noise sources is provided in National Planning Practice Guidance (PPG)<sup>1</sup>, which states:

*For noise sensitive developments, mitigation measures can include avoiding noisy locations in the first place; designing the development to reduce the impact of noise from adjoining activities or the local environment; incorporating noise barriers; and optimising the sound insulation provided by the building envelope. It may also be possible to work with the owners/operators of existing businesses or other activities in the vicinity, to explore whether potential adverse effects could be mitigated at source. Where this is the case, it may be necessary to ensure that these source-control measures are in place prior to the occupation / operation of the new development. Where multiple development sites would benefit from such source control measures, developers are encouraged to work collaboratively to spread this cost. Examples of source control measures could include increased sound proofing on a building (e.g. a music venue) or enclosing an outdoor activity (e.g. waste sorting) within a building to contain emissions.*

*Care should be taken when considering mitigation to ensure the envisaged measures do not make for an unsatisfactory development.*

The best form of noise mitigation at the proposed development site would arguably be mitigation ‘at source’, i.e. enclosing waste operations within a building. There is currently no evidence that the developer has sought to work collaboratively with the waste operators to explore this option.

#### Professional Practice Guidance on Planning & Noise - New Residential Development (ProPG)

ProPG was published by the Association of Noise Consultants (ANC), the Institute of Acoustics (IOA) and the Chartered Institute of Environmental Health (CIEH) in 2017.

In general, the guidance in ProPG is not relevant to the situation where industrial and/or commercial noise is present on the site and is considered to be “dominant”, as is the case at the proposed development area.

However, ProPG does provide useful and relevant guidance in relation to how LPAs should consider noise risk in applications for outline planning permission, which is reproduced below:

*3.12 ... LPAs should not grant outline planning permission for new residential developments at sites considered to pose a medium or high noise risk without first being satisfied that good acoustic design will be able to overcome the acoustic challenges.*

*3.13 In particular, where a site is considered medium or high risk following an initial site noise risk assessment, it is recommended that the examination of acoustically critical issues such as site layout, building heights, materials, landform contouring, detailed design and landscaping, the location of vehicle and pedestrian access, boundary treatments, amenity spaces etc. should not be left for agreement at a later stage.*

In general, it is considered that applicant has not demonstrated how noise from the adjacent Scrap Yard would be addressed through good acoustic design.

The outline application includes consideration of a 12m acoustic barrier and a noise attenuation buffer, aimed at reducing noise from the adjacent Scrap Yard to a level assumed to be appropriate by the applicant.

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<sup>1</sup> <https://www.gov.uk/guidance/noise--2>

However, there is not sufficient information in the Noise Constraints Study for ECC to be confident that these design measures are appropriate, and represent the 'suitable mitigation' referred to in the NPPF.

Due to the height of the proposed acoustic barrier solution, it is recommended that ECC undertake a review of the proposed outline design to ensure that the proposals are consistent with policy on landscape/visual impacts, and meets the relevant building codes.

## **Noise Constraints Study**

The report provides a very brief overall summary of the assessment undertaken, and provides no technical detail. Without understanding of the measurement, calculation and assessment work that underpins the recommendations in the report, Jacobs cannot comment on their suitability.

### Expected details in relation to the background noise survey

Expected details in relation to the background sound survey are set out in Section 12 of BS4142. None of these details are provided in the report.

### Expected details in relation to the noise survey of Benfleet Scrap sources

- Confirmation/evidence that Benfleet Scrap were contacted prior to the survey to confirm that their scrap operations during the survey were representative of the noisiest activities that can occur on site with the current planning controls in place;
- Detailed description of the location of sources during the survey;
- Description of measurement positions in relation to the sources (e.g. drawings / photographs);
- Detailed results of sound pressure measurements in octave or third octave bands;
- Methodology used to derive sound power values;

### Expected details in relation to calculations of specific sound level with proposed barriers

It would be expected that sufficient detail should be provided for the calculations to be independently verified, such as a description of source locations, source heights and octave band sound power values. The barrier attenuation calculated using ISO9613-2 would also be expected.

### Expected details in relation to BS4142 assessment

Expected details in relation to the BS4142 assessment are set out in Section 12 of BS4142. In particular, there is the potential for significant intermittency, impulsivity and tonality associated with the noise from scrap operations, and it would be expected that a detailed consideration of these aspects is provided. There is no information to suggest that the assessor has considered these aspects, which may mean that the potential impacts have been considerably underestimated. In addition, we would draw attention to the context of the specific level to be described and considered.

### Selection of allowable 'rating level' at new residential dwellings

The applicant has assumed that a difference of +5 dB between rating level and background level at new residential dwellings would be acceptable. BS4142:2014 + A1:2019 states that:

*A difference of around +5 dB is likely to be an indication of an adverse impact, depending on the context.*

It is considered that 'adverse impact' is a greater degree of impact than is appropriate at new housing. For new industrial development ECC generally requires that background noise levels at residential receptors are not exceeded by rating levels.

Additionally, the 'agent of change' principle will limit the power of the LPA to require the operators of the waste facility to reduce noise levels, in the event that future occupants of the proposed residential development site were to complain about noise. It is therefore recommended that a precautionary approach is taken in relation to the allowable difference between rating level and background level at the new residential dwellings.

## Summary

The review has identified several key issues with the submitted information:

- No evidence that the developer has followed advice in the National Planning Practice Guidance and sought to work collaboratively with the waste operators to mitigate noise at source;
- Lack of any technical detail in noise constraints study in relation to the following:
  - Background noise survey;
  - Noise survey of Benfleet Scrap sources;
  - Calculations of specific sound level;
  - Consideration of intermittency, impulsivity and tonality in BS4142 assessment; and
  - Consideration of context in BS4142 assessment
- Inappropriate selection of allowable 'rating level' at new residential dwellings.

Based on the information submitted to date in support of the planning application, Jacobs consider there to be the potential for new residents to be subject to adverse effects and for complaints regarding noise from scrap operations.