southdowns
environmental consultants

By E-mail

Chris Wojtulewski
Parker Dann Chartered Town Planning Consultants
Suite 510, Waterside Centre
North Street
Lewes
East Sussex
BN7 2PE

Our Ref: 2001w-SEC-00003-02

28th April 2017

Dear Chris

**RESPONSE NOTE TO COMMENTS MADE BY THE ARUN DISTRICT COUNCIL (ADC) EHO ON THE PLANNING APPLICATION FOR THE PROPOSED DEVELOPMENT AT CLYMPING**

## 1. Introduction

Southdowns Environmental Consultants Ltd produced a noise assessment report for the proposed development of Land at Clymping and following submission of the outline planning application (ref: CM/1/17/OUT), comments were made by the ADC EHO. These comments are addressed in this letter report and planning conditions are proposed to ensure that the noise levels at the proposed development and also noise levels from the development are within acceptable criteria.

## 2. Comments and Responses

The comments received and responses given are presented below.

### 2.1 Comment 1

*"Please could you ask the applicant to confirm the location and extent of the 1.8m high garden fencing on the boundary of the southernmost proposed properties? Similarly, please could they provide the location and extent of the proposed 2m roadside bund with 1m barrier on top?"*

Response

Based on the Masterplan we have assumed that the fence line will be along the southern boundary and the bund to be adjacent to the A259. The illustrative Masterplan, with an overlay of the proposed bund and barrier is shown in Figure A1 of Appendix A of this report.

### 2.2 Comment 2

*"We would also be interested to see the predicted noise levels with firstly just the 1.8m fencing and secondly both the fencing and the bund. I still have concerns that the predicted free-field garden noise levels of 54.9dB (which would normally be rounded up to 55dB) is what the WHO*

*describes as 'serious annoyance'. Although paragraph 6.1.2 of the noise report states that these two mitigation measures could be implemented, paragraph 6.1.3 then states that 'it is recommended that when the layout design is finalised detailed calculations of noise levels are undertaken to confirm that the criteria is still predicted to be achieved'. My concerns relate to the fact that if the criteria then cannot be achieved, it is the future residents who will be impacted, and it is then too late to change the situation. I would rather be sure at this point that the relevant noise levels can be achieved".*

Response

Given the noise levels it would be unlikely that the criteria cannot be achieved with the mitigation in place. The comment in paragraph 6.1.3 is to ensure that the final design includes the appropriate mitigation to ensure the criteria are achieved and a planning condition has been recommended to achieve this. It is noted that this application is for outline planning permission and that there may be amendments to the design, to take into account outline planning application feedback and requirements. Future road traffic noise levels have been predicted in the south facing gardens at properties on the southern edge of the development, in the locations displayed in Figure A1 of Appendix A. Predictions at the properties closest to the A259 with and without the described mitigation measures in place are provided in Table B1 below. The noise levels with mitigation are predicted to be below the BS 8233 and WHO upper guideline values of 55 dB $L_{Aeq,T}$.

| Receiver ID | Receiver Name | Predicted Free-Field Future Traffic Noise Level dB $L_{Aeq,16hr}$ | |
|---|---|---|---|
| | | Without Mitigation | With Mitigation |
| RG1 | Rear Garden 1 | 56.5 | 51.2 |
| RG2 | Rear Garden 2 | 56.6 | 51.3 |
| RG3 | Rear Garden 3 | 56.1 | 51.4 |
| RG4 | Rear Garden 4 | 55.9 | 51.6 |

**TABLE B1: PREDICTED REAR GARDEN ROAD TRAFFIC NOISE LEVELS WITH AND WITHOUT MITIGATION**

## 2.3 Comment 3

*"Within the report, paragraphs 2.3.9, 2.3.10, 2.3.11 and section 6.4 discuss NEC categories. These were withdrawn in 2012 and replaced by the NPPG".*

Response

The NPPG assessment is detailed in Section 6.5 and concludes:

> *"With the mitigation in place the noise levels will be within BS8233 and WHO criteria and is considered unlikely to cause change in behaviour or attitude for new noise sensitive receptors introduced by the proposed development. This would place the development in the No Observed Adverse Effect Level (NOAEL) category for noise sensitive receptors introduced by the development".*

The NEC category assessment is included to meet the requirements of the Arun District Council Local Plan Policy QE DM1 'Noise pollution' which requires that where residential development is proposed within First Priority Areas, or in close proximity to noise sources from road, rail or air the site must:



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Be supported by an assessment to determine the Noise Exposure Category (NEC) and designed to ensure that residents will not be adversely affected by noise; and

Consider both the likely level of exposure at the time of application and any increase that might be reasonable expected in the foreseeable future.

### 2.4 Comment 4

*"As stated in my previous email of 28th February, with windows partially open, the 35dB(A) criterion is exceeded by up to +10dB LAeq (16 hour) in the daytime and up to 9 dB LAeq (8 hour) at nighttime. I appreciate that the report suggests mitigation for this including sound attenuating ventilators in the window units, acoustic air bricks in the façade, passive whole house ventilation or mechanical silenced ventilation. However, I would question how realistic it is to expect future residents to not open the windows in a rural environment such as this one. If this application is given permission, I would strongly recommend that a condition requiring acoustic testing of each dwelling prior to first occupation is placed on the permission, to ensure that the stated levels can be reached".*

Response

The requirement for acoustic testing of each dwelling prior to occupation may be considered onerous. It would make sense to focus the compliance testing on the proposed dwellings closest to the A259 and Church Lane and a planning condition is proposed to ensure acoustic testing of the dwellings in the areas with the highest noise levels.

With regards to expecting residents to not open the windows, the windows on other facades can be opened and the design of the dwellings and their orientation in relation to the A259 and the layout has been adapted to take the noise levels from the A259 into account. The noise contour showing where alternative ventilation and/or alternative layouts may be required is shown in Figure A2. This contour shows the spread of free-field road traffic noise across site, at a height of 4m above ground (representative of 1st floor window height). An illustrative layout of the upper floor bathrooms, corridors and stairwells on the noisier southern and eastern facades and the bedrooms on the quieter facades is shown in Figure A3.

The contour shows that there is a mixture of properties that are predicted to either achieve or exceed the internal noise guideline value of 35 dB $L_{Aeq,16hr}$. Typically the properties that are predicted to achieve the guideline value are positioned away from the main roads to the east and south.

Almost all of the proposed residential properties achieve the guideline value on either the front or rear façade. As such, careful planning of the building layouts should ensure that sensitive rooms have façades that are predicted to achieve the guideline value. A small number of proposed dwellings where both of the main facades are predicted to exceed the internal guideline value of 35 dB are located either in the south east corner of the proposed development.

## 3. Planning Conditions

Planning conditions, whose detailed drafting will be addressed by the programmed work on conditions in the Planning Performance Agreement (PPA) should embrace the following:-

- Securing provision of a bund as indicated generally in Appendix A, including a construction method statement before development is occupied;



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- Either commensurate with the approval of reserved matters, or otherwise before development commences, to deliver an acoustic report, including a scheme of mitigation, indicating how the reserved matter details will secure compliance with relevant criteria in BS8233 and BS4142 and requiring such features of mitigation secured prior to occupation of the approved criteria;

- Undertake and submit for approval a measurement survey prior to occupation to demonstrate compliance with BS8233.

Should it be considered that detailed wording should be agreed prior to the planned consideration of conditions in the PPA we would be happy to table our thoughts.

Yours sincerely

For Southdowns Environmental Consultants Ltd



Adam Glass MIOA

Senior Environmental Consultant



ARUN DISTRICT COUNCIL CM/1/17/OUT

## APPENDIX A: FIGURES

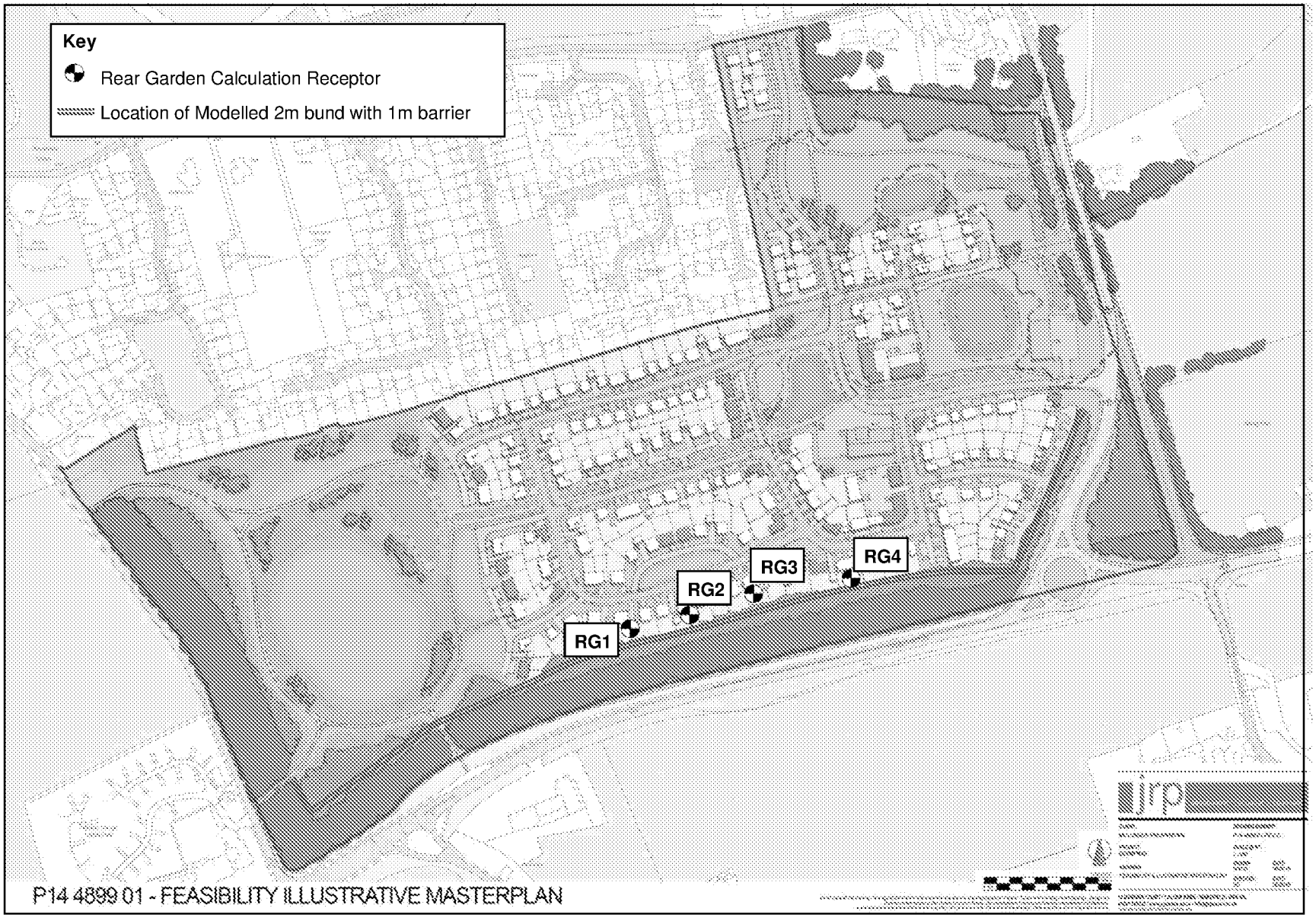



**FIGURE A1: PROPOSED DEVELOPMENT LAYOUT**

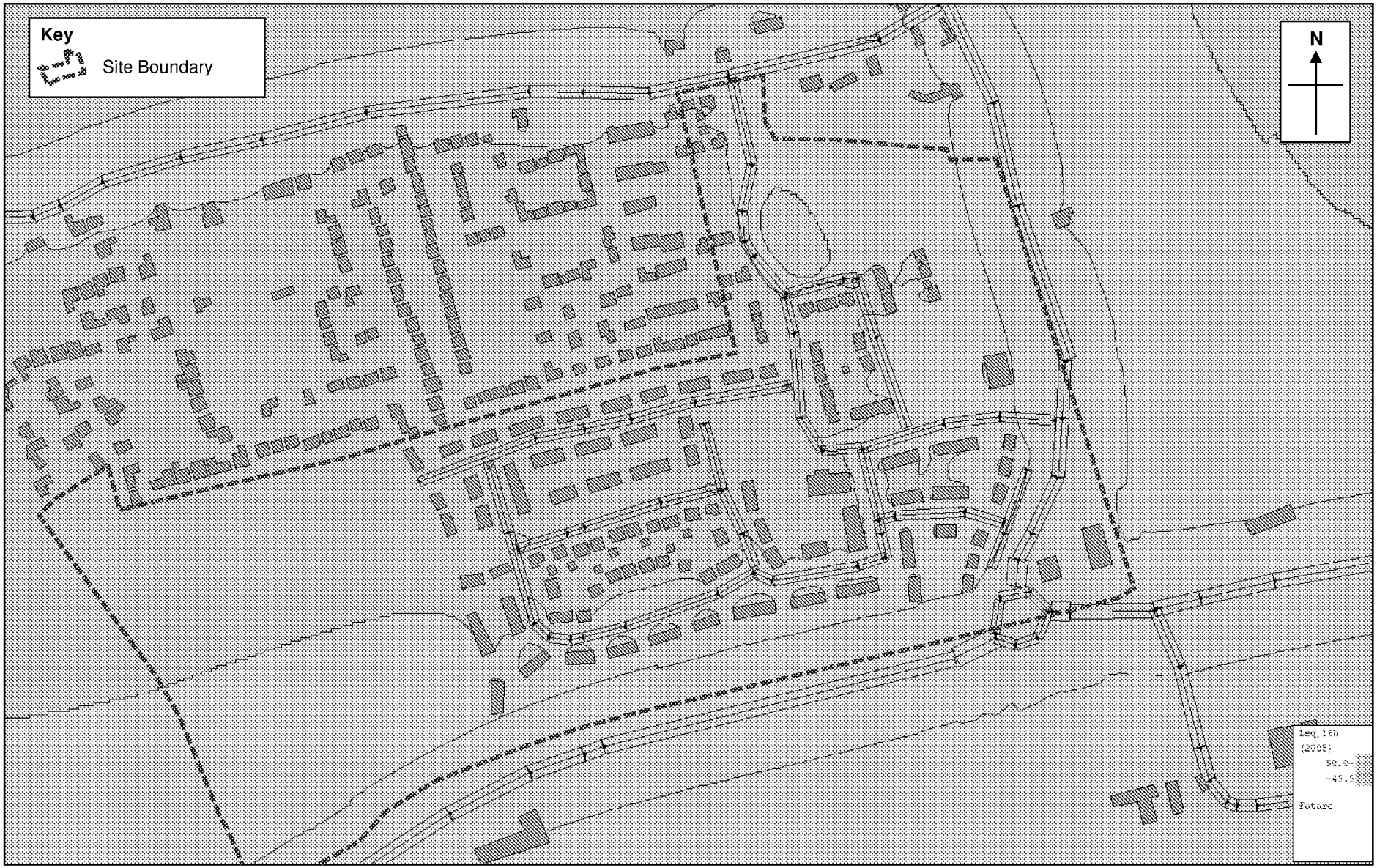
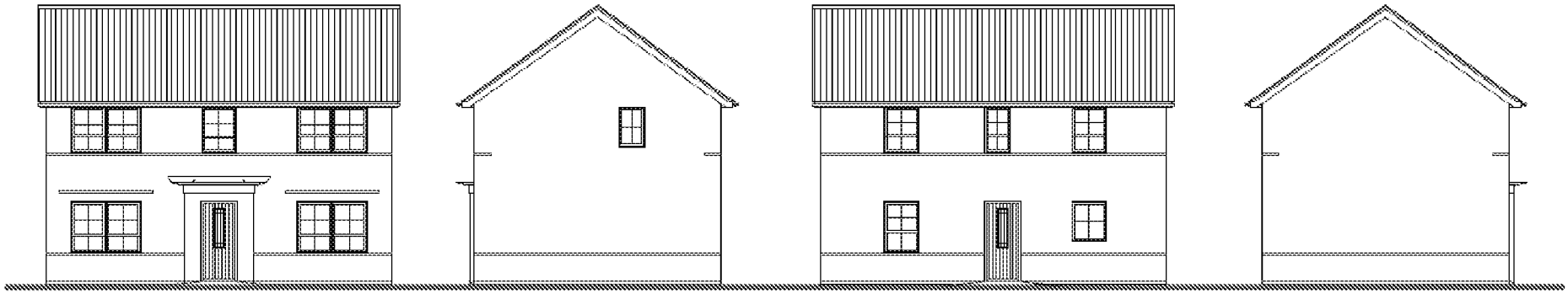
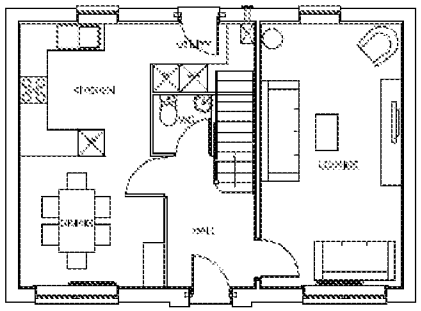
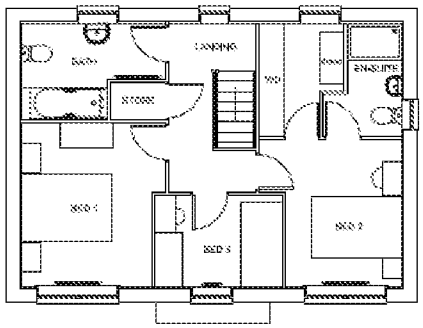



**FIGURE A2: LAEQ,16HR CONTOUR PLOT (FREE-FIELD) AT 4M HEIGHT SHOWING FIRST FLOOR OF DWELLINGS PREDICTED TO ACHIEVE OR EXCEED THE 35 dB LAEQ,16hr DAYTIME RESTING CRITERIA IN BEDROOMS, WITH FUTURE TRAFFIC CONDITIONS**

*Note: blue areas presented above represent areas where internal noise levels are predicted to be achieved with windows open for ventilation; pink areas represent areas where this criterion is not achieved with a 15 dB reduction for an partially open window i.e above 50 dB LAeq,16hr.*




jrp

CLIENT:
MULGRAVE PROPERTIES

DRAWING NUMBER:
P14:4899:10

PROJECT:
PROPOSED RES| DEVELOPMENT
CHURCH LANE, ELVIMPING

SCALE @ A3:
1:100

DRAWN: DATE:
DB| APR 17

DRAWING:
HOUSETYPE 'A'
PLANS & ELEVATIONS

CHECKED: DATE:
LB APR 17

1:100 SCALE

P14:4899:10 / PLANS & ELEVATIONS

14 MARINER COURT / CALDER PARK / WAKEFIELD / WF4 3FL
01924 383322 / www.jrpassoc.co.uk / info@jrpassoc.co.uk

**FIGURE A3: EXAMPLE SINGLE ASPECT DWELLING LAYOUT – FRONT ELEVATION FACING NORTH**