



PROJECT TECHNICAL MEMORANDUM

JOB TITLE: 15 Monmouth Street
PROJECT NO: 17755
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RE: 15 MONMOUTH STREET PLANT NOISE ASSESSMENT

Further to our recent correspondence we comment as follows.

1.0 Introduction

Existing building services plant is located on the first floor flat roof to the rear of 15 Monmouth Street. Residential dwellings overlook the plant.

It is proposed to extend the rear of 15 Monmouth Street up one storey. The existing plant will then be relocated to the new second floor flat roof.

The proposed extension takes the existing plant approximately 2.5 metres closer to the neighbouring residential dwelling.

2.0 Existing Plant

We understand there are approximately seven units installed to the rear of 15 Monmouth Street. The units have been installed for at least four years. There have been no complaints made during this period regarding the plant noise.

Also installed in the light-well are numerous items of plant serving neighbouring properties.

The plant is installed on the flat roof to rear of 15 Monmouth Street. The neighbouring property overlooks the plant causing a reverberant light-well area in which the plant is located.

3.0 Noise Impact

The existing plant is currently installed in a light-well area to the rear of 15 Monmouth Street. Due to the reverberant nature this creates, the increase in noise level at the neighbouring property will not be as noticeable as if the area were open space.

We have calculated the plant noise may increase by up to approximately 5dBA at the neighbouring residential dwelling.

In order to assess the impact of plant noise at noise sensitive receptors, it is necessary to relate the noise level increase due to the works to typical subjective human responses. The following table relates changes in overall sound levels to normal human responses.

Change in Sound Level dBA	Interpretation	
	Subjective Impressions	Human Response to change in noise level
0 to 2	Imperceptible change in loudness	Marginal
3 to 5	Perceptible change in loudness	Noticeable
6 to 10	Up to doubling or halving of loudness	Significant
11 to 15	More than doubling or halving of loudness	Substantial
16 to 20	Up to quadrupling or quartering of loudness	Substantial
21 +	More than quadrupling or quartering of loudness	Very Substantial

From the table above it is considered that the increase in noise level at the neighbouring residential dwelling is likely to be noticeable but not significant.

4.0 Conclusion

Existing building services plant is to be relocated on the proposed second floor flat roof to the rear of 15 Monmouth Street. Residential dwellings overlook the plant.

The plant noise may increase by up to approximately 5dBA at the neighbouring residential dwelling.

It is considered that the increase in noise level at the neighbouring residential dwelling is likely to be noticeable but not significant.

We trust the above to be clear and of assistance but should you have any queries please do not hesitate to contact us.

For and on behalf of
Hann Tucker Associates



Gareth Evans
Senior Consultant