SOUTH HOLLAND DISTRICT COUNCIL

LOCATION OF PREMISES FOR THE BOARDING AND BREEDING OF DOGS AND OTHER ANIMALS

-Noise Issues-



SUPPLEMENTARY PLANNING GUIDANCE

-Adopted December 1999-

SOUTH HOLLAND DISTRICT COUNCIL

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SOUTH HOLLAND DISTRICT COUNCIL

1.0 INTRODUCTION

1.1 This Supplementary Planning Guidance (SPG) deals with the issue of noise impact from ***animal boarding and breeding premises*** and the locational matters that arise. Its purpose is to provide a standard publicised procedure for assessing such planning proposals. This enables:

- a consistent approach to be taken to the assessment of comparable applications;
- a balance to be achieved between allowing such development and protecting the reasonable amenities of residential and other uses in the District.

It also provides a means of assessing the suitability of new proposals for noise-sensitive uses (for example, new housing) in the vicinity of boarding and breeding premises.

1.2 **So when will the SPG apply?**

1) It will be a material consideration when determining planning applications for the development of new premises or for the extension of existing ones. (The SPG is not retrospective so it does not apply to developments which were permitted prior to its adoption). But when is it necessary to apply for planning permission to build or use premises for the boarding, breeding or keeping of animals? This is established by reference to the Town and Country Planning Acts, related Statutory Instruments and the particulars of the proposal. The Council's advice by way of practice is as follows:

- *For a case involving less than 7 adult dogs*- This may possibly represent a change of use. Discuss your proposal with us. In determining whether or not a planning application will be required regard will be had to the circumstances of the case. This includes the key consideration of location, also the type of property, and the type and nature of the activity (particularly breeding).
- *A case involving 7 or more adult dogs*- The Council will always require the submission of a planning application in order that we can consider change of use.

So, planning permission may be required irrespective of whether the premises are to be run as a business. If it is to be a business then generally permission will have to be sought.

(Note that the requirement for planning permission is quite separate from any need for a boarding or breeding licence which may be required under other legislation).

2) The SPG will also be a material consideration when determining planning applications for noise-sensitive uses where the amenities of those uses could be significantly reduced due to the noise impact of nearby animal boarding and breeding premises.

1.3 The SPG has been the subject of close liaison between the Council's Housing & Planning Services and Environment & Leisure Services. It has been prepared in accordance with the criteria set out in the Department of the Environment, Transport and the Regions' ***Planning Policy Guidance Note 12 "Development Plans"*** (paragraphs 3.15 to 3.17), and has been adopted by the Council following public consultation. The SPG supplements the Development Plan, is consistent with it and will be a material consideration carrying substantial weight in the determination of planning applications.

1.4 Hence the SPG is for use in the decision-making process and it also provides useful advice to prospective applicants.

2.0 CONTEXT

2.1 The Government has provided local authorities with guidance on the use of their planning powers to minimise the adverse impact of noise. This is set out in the Department of the Environment's ***Planning Policy Guidance Note 24 "Planning and Noise"***. It outlines the considerations to be taken into account in determining planning applications both for noise-generating activities and for noise-sensitive developments. So, PPG24 provides a context for the Council's preparation and use of this SPG relative to the principle of location for animal boarding and breeding establishments.

2.2 In respect of noise-sensitive uses (be they existing or proposed), typically this will be housing but as paragraph 6 of PPG24 states, it can also include hospitals and schools. Offices can also be noise-sensitive (see Annex 1 of PPG24). Regard will be had to the circumstances of the case.

2.3 Paragraphs 13 and 14 of PPG24 highlight how engineering, layout and administrative measures can influence noise impact, and potentially reduce it. Preferably the applicant will discuss these with Council officers prior to submission of the planning application so that the proposals will therefore incorporate appropriate measures. The Council may, however, need to secure measures through the use of planning conditions (paragraphs 15 to 19 of PPG24 refer).

2.4 Within the adopted ***South Holland District Local Plan*** Policy E1 provides a broad range of assessment criteria for dealing with development proposals generally. Policy E1 seeks amongst other things to maintain amenity and resist pollution. This provides a policy context for this SPG. There will also be other considerations which are material to the determination of planning applications. However, the issue of noise impact is of particular relevance in the case of proposals for animal boarding and breeding premises.

2.5 Noise impact can be influenced by a number of factors. Matters like the management of such establishments, working conditions and animal welfare are primarily regulated by non-planning legislation. For example, existing premises may cause a level of noise impact so high that it can be counted as a 'statutory nuisance'. In such a situation the local

authority has power, under environmental protection law, to serve notices requiring noise levels to be reduced.

2.6 This SPG, however, can only deal with matters capable of planning control. As such it deals fundamentally with whether this particular land use is appropriate in a given situation. Also, it does not necessarily distinguish between individual types or breeds of animal.

2.7 The SPG presents a detailed method for assessing proposals for dog establishments as they tend to give rise to more severe and commonly occurring noise impact than do establishments for other animals (such as cats). Nevertheless the underlying methodology will be relevant and used as a basis for assessing noise impact of proposals irrespective of animal type.

3.0 BASIS

3.1 There is no specific guidance nor recommended noise level standards relating to animal boarding or breeding establishments. In the absence of these reliance must be placed upon proven methods of measurement and assessment published elsewhere.

3.2 In general, a noise is liable to provoke complaints whenever it exceeds the background noise by a certain margin or when it attains a certain absolute level. Noise levels at or below the existing background level are unlikely to give rise to complaints.

3.3 This fundamental acoustic principle underpins the guidance contained in the most relevant noise control documents, BS 4142: 1997 "Rating industrial noise affecting mixed residential and industrial areas" and BS 5228: Part 1 1997 "Noise and vibration control on construction and open sites". The methodology set out in this SPG is based on those documents.

3.4 Operational experience shows that the distance between an animal boarding/breeding establishment and noise-sensitive locations is key to the incidence of complaints. The distance required will depend upon the specific circumstances of the individual case, particularly the background noise level which exists. So the SPG provides the procedure by which one can assess whether there is an adequate separation distance for a particular proposal. It provides safeguards to this particular type of commercial operation in any given location and at the same time ensures reasonable protection to nearby noise-sensitive premises.

3.5 The attached Technical Appendix which forms part of the SPG defines the methodology to be used. It also explains the principles behind the various assumptions that have had to be made in order to establish a consistent approach to what is, by its very nature, a variable source of noise. At the end of the Appendix are two case studies providing worked examples of the procedure.

3.6 The source noise data (in Figure D1 of the Technical Appendix) is extrapolated from measured data and is assumed to be representative of conditions existing at commercial kennels.

3.7 The separation distances evolved from the SPG assessment are consistent with those existing kennels within the District where there is no history of complaints of noise nuisance.

4.0 OVERVIEW

4.1 The onus will be on the applicant to submit as part of the planning application:

- indication of whether the premises are for boarding or for breeding (or both);
- the number of dogs, being the total number of boarders or in the case of breeding then the total number of adult dogs (NB. if the owner/operator of the premises intends to keep their own pet dogs on the site then these must be included in the totals given);
- scaled plans of design, layout and construction of the kennels and any runs proposed;
- an indication of the intended occupancy of any dwelling forming a part of the proposals and its relationship to the boarding and breeding operation.

4.2 These are the matters which will then be assessed through the stage-by-stage procedure set out in the Technical Appendix (at page 11) and which may be controlled through the use of planning conditions on any permission granted.

4.3 In addition to information provided by the applicant the assessment procedure also takes into account the following influences on noise impact:

- the background noise level (so regard is had to existing noise levels at that location);
- specific factors about the location of the proposal including the types of ground and any screening between the noise source and noise-sensitive premises in the vicinity;
- the influence of prevailing wind on noise impact;
- where there are already boarding and breeding establishments within the vicinity of the proposed premises and noise-sensitive locations then the cumulative noise impact.

TECHNICAL APPENDIX

Method for the assessment of dog noise from boarding and breeding establishments

Method for the assessment of dog noise from boarding and breeding establishments

Foreword

This assessment method is intended to provide supplementary planning guidance on the suitability of locations for dog boarding and breeding establishments with open air runs.

The standard will cover all new kennels and those established kennels seeking expansion including any cumulative effects upon neighbouring noise sensitive locations.

The propagation of airborne sound is highly complex being influenced by a range of atmospheric effects, ground absorption or reflection and attenuation from barriers.

In general a noise is liable to provoke complaints whenever it exceeds the background noise by a certain margin or when it attains a certain absolute level. Noise levels at or below the existing background noise level are unlikely to give rise to complaints.

The methodology is that of assessing the specific noise level of the source, determined as an equivalent continuous A weighted sound pressure level (LA eq T) against the existing background noise level (LA 90T) at noise sensitive locations.

For the purposes of this assessment unless otherwise stated the relevant definitions and measurement procedures given in the following British Standards shall apply -

(i)	BS 4142 : 1997	Rating industrial noise affecting mixed residential and industrial areas.
(ii)	BS 5228 : Part 1 1997	Noise and vibration control on construction and open sites.
(iii)	BS 7445 Parts 1, 2, 3 1991	Description and measurement of environmental noise.

Interpretation

For the purposes of this assessment the following additional interpretations and assessment criteria are to be used.

1. Background noise level LA 90T

Measurements to be made at a position close to a noise sensitive receiver location in the open air and at least 3.5m from any reflecting surface other than the ground. Precautions shall be taken to minimise any interference on the noise readings from any sources such as wind, heavy rain etc.

Measurement time intervals shall be sufficient to obtain a representative value of the daytime (0700 - 1900 hours) background noise level. The measurement time interval shall be at least 30 minutes comprising 10 minute periods of which the arithmetic average shall be taken as representative.

For multiple receiver locations where it is not practical to measure the background noise level at all receiver locations it will be acceptable to measure the background noise level at some other position (P) where it is presumed to be equivalent and report the reasons for presuming it to be equivalent.

All receiver locations shall be assessed according to their use classification.

2. **Activity LA eqT** (Figure D1)

Baseline source data is representative of 1 medium sized dog in the open air barking at a distance of 10 metres for a cumulative period of 10 minutes in any hourly period.

For noise assessment purposes the number of dogs barking on any site shall be assumed to be as follows:-

Boarding **Total number of dogs x 0.6**

Breeding **Adult dogs + 25% (puppies) x 0.5**

(for calculation purposes any decimal place shall represent 1 dog)

Adult dogs to be determined as per the breed categories in Table 1.

Operational constraints supported by planning conditions may be appropriate in certain cases. Assumed that all dogs will be housed in insulated kennels during nightime.

Where there is to be any deviation from the standard criteria a justification for doing so shall be reported.

Total activity source noise for a number of dogs contained in open runs is given in Figure D1.

3. **Distance adjustment** (Figure D2)

Consideration should be given to the nature of the ground over which the sound is being propagated.

Note: *Hard ground is taken to refer to ground surfaces which reflect sound, for example, paved areas, rolled asphalt and surface water. Soft ground is taken to refer to surfaces which are absorbent to sound, for example grassland, cultivated fields or plantations. Where the ground cover between the source and the receiver is a combination of hard and soft, it is described as mixed.*

Soft ground attenuation does not apply for propagation distances less than 25m.

The effect of screening and soft ground attenuation should not normally be combined. Either the attenuation from screening and hard ground propagation or the attention of soft ground, whichever is the greater, should be taken.

At distances over 300m noise predictions should be treated with caution, especially where a soft ground correction factor has been applied, because of the increasing importance of meteorological effects.

Where there are clearly screening effects both at the source or receiver positions some adjustment may need to be made.

For propagation over mixed soft and hard ground, the additional attenuation due to soft ground (Ks - Kh) should be reduced according to the proportion of soft ground (e.g., for 25% soft ground 0.25 (Ks - Kh) should be used).

Unless otherwise agreed, for calculation purposes the source point shall be taken as the geometric centre of the runs.

4. Screening effect of barriers

(Figure D3)

The accurate determination of the effectiveness of a barrier is a complex process. A knowledge of sound pressure levels at separate frequencies and also of the geometry of the receiving position in relation to the source and the barrier are required. Calculations may be made in octave bands instead of 'A' weightings to provide a more accurate barrier attenuation; if the octave band sound levels and the positions of the sources, receiver and barrier are known. The acoustic spectrum in Figure D1 should be revised in accordance with the activity LA eq T for the number of dogs being assessed. The barrier attenuation can be calculated from Figure D3. The result of this analysis should be logarithmically summed and weighted to provide an 'A' weighted level.

(As a working approximation, if there is a barrier or other topographic feature between the source and the receiving position, assume an approximate attenuation of 5dB when the dogs are just visible to the receiver over the noise barrier, and of 10dB when the noise screen completely hides them from the receiver. High topographical features and specifically designed and positioned noise barriers could provide greater attenuation.)

5. Prevailing wind direction

(Figure D4)

In anything other than an idealised atmosphere sound propagation is likely to be subject to some degree of additional attenuation or increase due to both atmospheric effects and the directivity of the noise source.

For propagation close to the ground sound velocity gradients which can be caused by wind or temperature have a big influence on noise levels received at a distance.

The prevailing wind for eastern England based on typical meteorological data is from within the 165-255 degree sector (Figure D4) and receiver locations within the downwind 345-75 degree sector will potentially be subject to the greater impact.

Receiver locations other than downwind of the noise source are likely to benefit from attenuated noise levels.

For the purpose of this assessment a penalty correction of +3dB shall be added to specific noise level for noise sensitive locations within the 345-75 degree sector (i.e., downwind of the prevailing wind sector).

6. Cumulative impact of boarding and breeding kennels

Where there are existing kennels or new kennels are proposed to be located within an area each kennel unit shall be assessed separately and the resulting specific noise level values shall be logarithmatically summed to produce a cumulative value at noise sensitive receiver locations which shall then be assessed against the background level.

7. Assessment Criteria

The objective shall be that the specific noise level does not exceed the background noise level.

Assessment Method

Stage 1	Determine background noise level (LA 90T) at the noise sensitive receiver locations.
Stage 2	Determine number of dogs to be used for assessment purposes in relation to boarding/breeding.
Stage 3	Determine activity noise level (LA eq T) from figure D1.
Stage 4	Determine the distance adjustments from figure D2 for soft ground, hard ground or mixed ground.
Stage 5	Determine the screening attenuation from figure D3 and add this to the distance adjustments for either hard or mixed ground.
Stage 6	Using the greater attenuation value subtract it from the activity noise level and determine the specific noise level at the receiver location.
Stage 7	Add the prevailing wind penalty correction (+ 3dB) to the specific noise level for noise sensitive locations within the 345-75 degree sector (downwind of the kennels). Figure D4
Stage 8	Assess the specific noise level against the background noise level.
Stage 9	For cumulative assessments follow stages 1 - 7 for each kennel unit and then having summed logarithmically determine a cumulative specific noise value and assess this against the background level.

Table 1

List of Breeds

Toy	Small	Medium	Large	Giant
Dog becomes adult at approx 6-9 months	**Dog becomes adult at approx 9-12 months**	**Dog becomes adult at approx 12-18 months**	**Dog becomes adult at approx 18-22 months**	**Dog becomes adult at approx 22 months**
Breeds	**Breeds**	**Breeds**	**Breeds**	**Breeds**
Chihuahua	Basenji	Afghan Hound	Bassett Hound	Alaskan Malamute
Dachshund (min)	Bedlington Terrier	Airedale Terrier	Belgian Shepherd Dog	Anatolian Shepherd Dog
English Toy Terrier	Border Terrier	Australian Cattle Dog	Bernese Mountain Dog	Bloodhound
German Spitz	Boston Terrier	Beagle	Borzoi	Bull Mastiff
Maltese	Cairn Terrier	Bearded Collie	Bouvier des Flanders	Great Dane
Miniature Pinscher	Cavalier King Charles Spaniel	Border Collie	Boxer	Irish Wolfhound
Papillon	Dachshund (std)	Cocker Spaniel	Briard	Komondor
Pekingese	Dandie Dinmot	Elkhound	Bulldog	Mastiff
Pomeranian	Fox Terrier	English Springer	Bull Terrier	Newfoundland
Poodle (toy)	Japanese Spitz	French Bulldog	Chow Chow	Pyrenean Mountain Dog
Yorkshire Terrier	Lancashire Heeler	Hungarian Pult	Clumber Spaniel	St Bernard
	Lhasa Apso	Keeshound	Curly Coated Retriever	
	Manchester Terrier	Norwegian Buhund	Dalmatian	
	Pug	Pharoah Hound	Deerhound	
	Schipperke	Pointer	Dobermann	
	Schnauzer (min)	Rough Collie	English Setter	
	Scottish Terrier	Saluki	Estrela Mountain Dog	
	Sealyham Terrier	Schnauzer (std)	Flat coated Retriever	
	Shetland Sheepdog	Siberian Husky	German Shepherd Dog	
	Shin Tzu	Soft Coated Wheaten Terrier	German Short Haired Pointer	
	Tibetan Spaniel	Staffordshire Bull Terrier	Giant Schnauzer	
	Tibetan Terrier	Welsh Corgi	Golden Retriever	
	Welsh Terrier	Welsh Springer	Gordon Setter	
	West Highland	Whippet	Greyhound	
			Hovawart	
			Hungarian Vizla	
			Irish Setter	
			Irish Water Spaniel	
			Japanese Akita	
			Labrador Retriever	
			Large Munsterlander	
			Maremma	
			Old English Sheepdog	
			Otterhound	
			Poodle (std)	
			Rottweiler	
			Weimaraner	
			Rhodesian Ridgeback	

Dog Noise at 10 Metres.

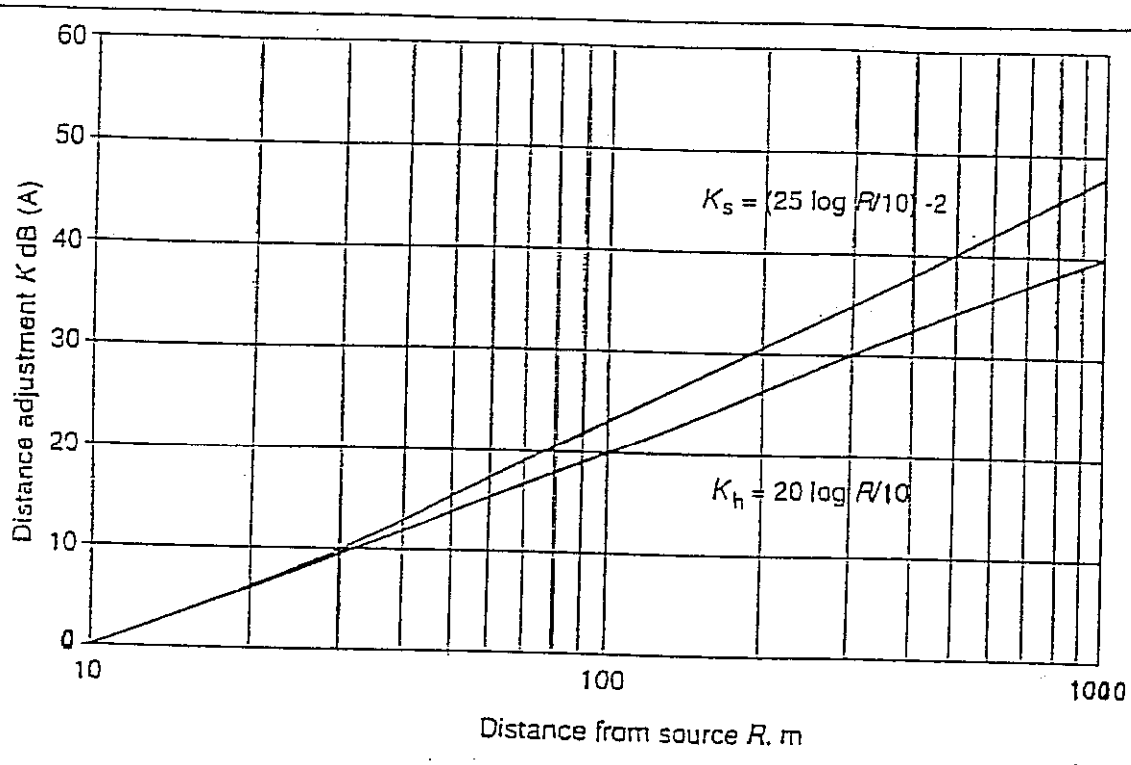
Figure D1.

No of Dogs	Activity (LAeqT)
1	65.6
2	68.6
3	70.4
4	71.6
5	72.6
6	73.4
7	74.1
8	74.6
9	75.1
10	75.6
11	76.0
12	76.4
13	76.7
14	77.1
15	77.4
16	77.6
17	77.9
18	78.1
19	78.4
20	78.6
21	78.8
22	79.0
23	79.2
24	79.4
25	79.6

Acoustic Spectrum of 1 Dog Barking.

Frequency (Hz)	125	250	500	1K	2K	TOTAL
dB(A)	26.0	38.5	60.9	63.1	55.4	65.6

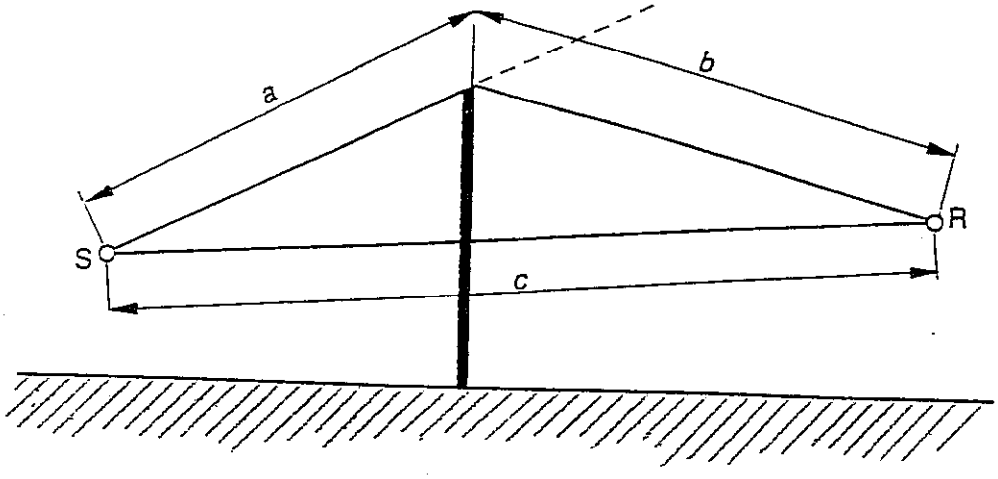
Figure D2



NOTE: K_s = soft ground K_h = hard ground

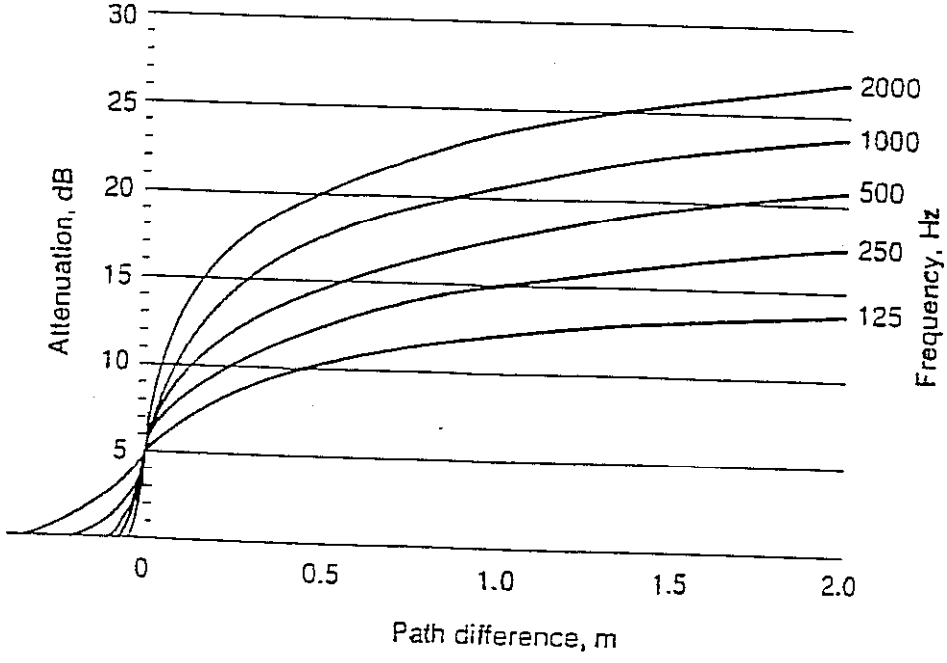
Figure D.2 Distance adjustment K for activity L_{Aeq}

Figure D3



NOTE: S = source 0.5 metre height
R = receiver 1.5 metre height

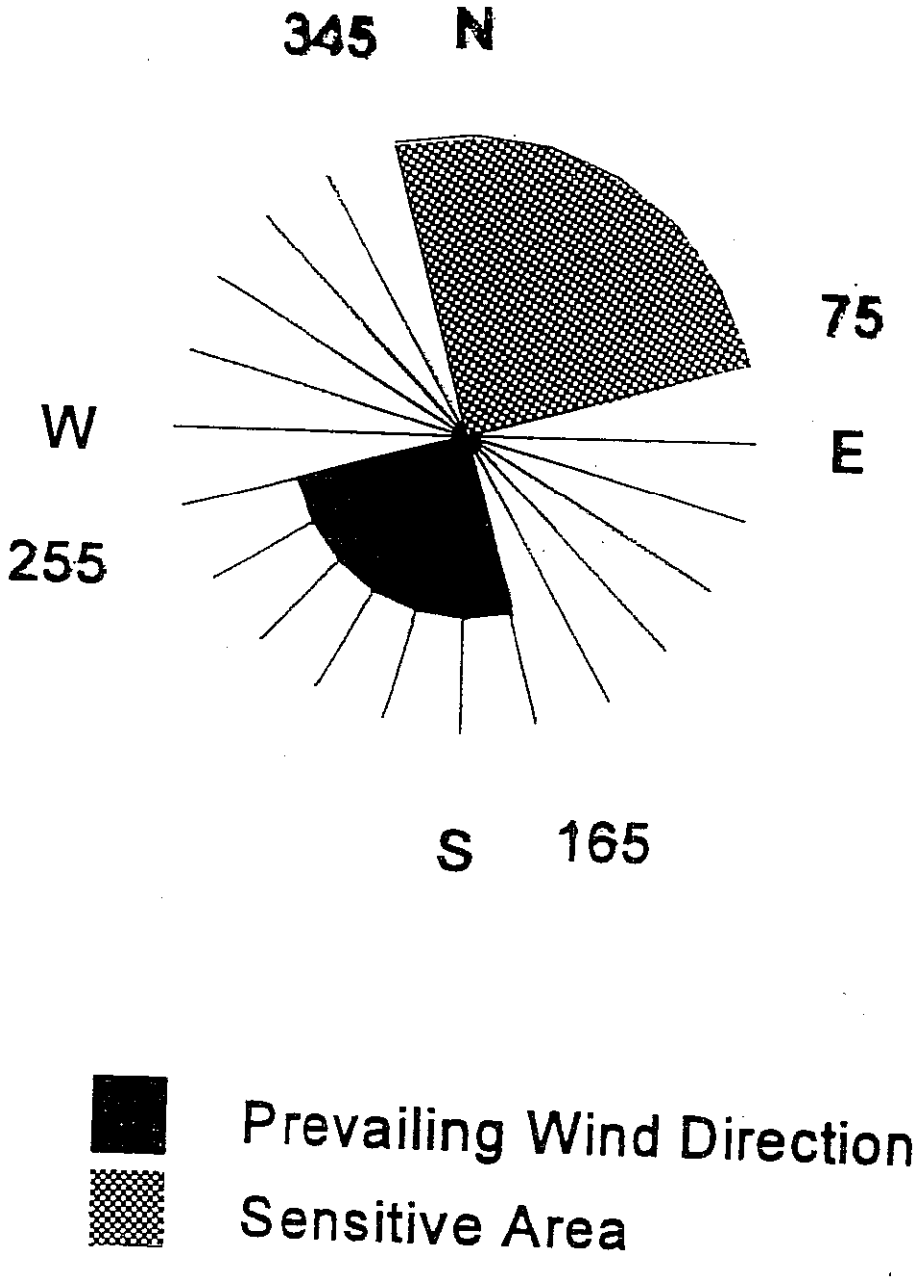
a) Illustration of path difference (a-b-c) introduced by a barrier



b) Barrier attenuation at different frequencies of sound

Figure D.3 Screening effect of barriers

Figure D4


345
N
75
W
E
255
S
165
Prevailing Wind Direction
Sensitive Area

CASE STUDIES

Case Study 1

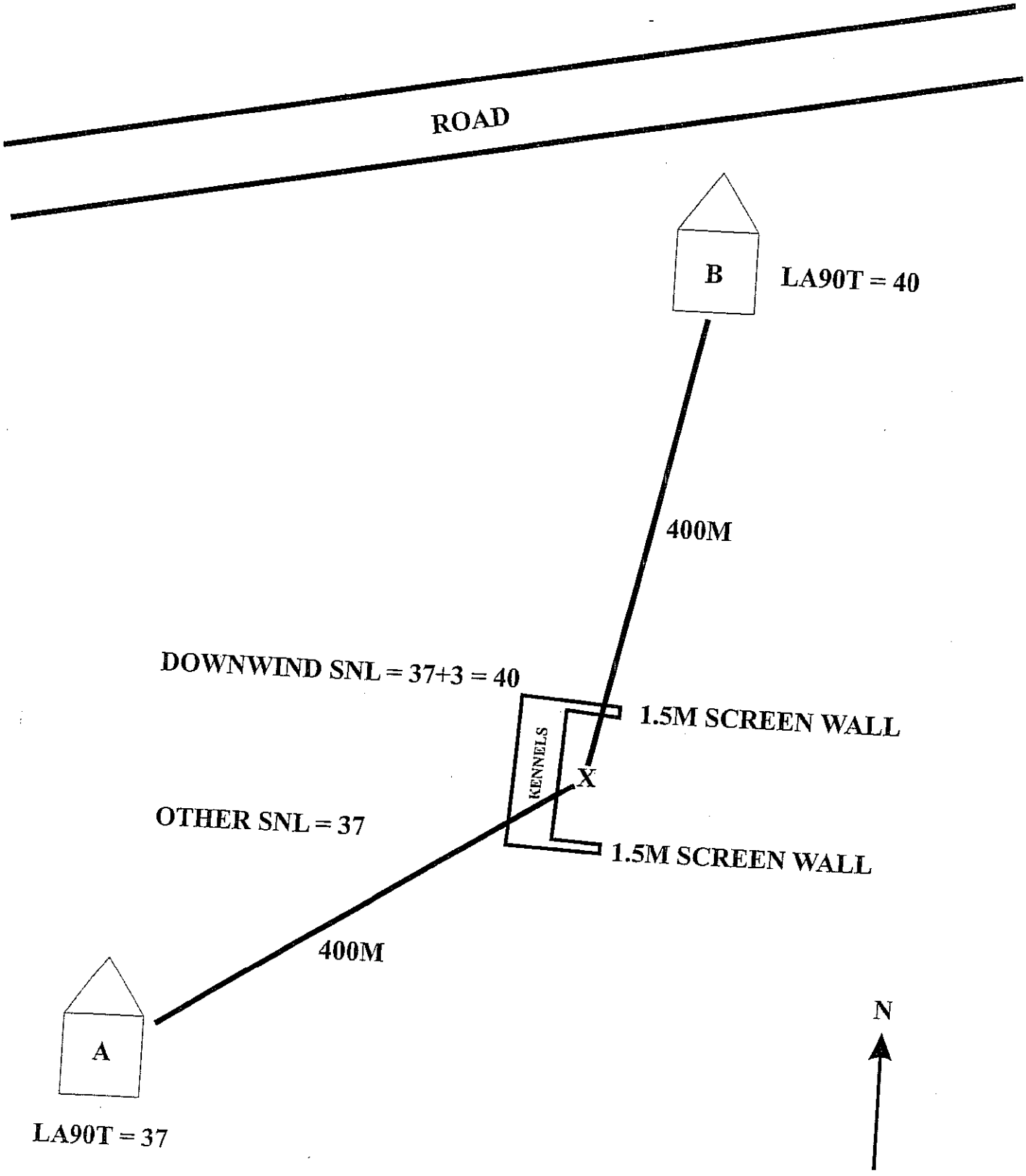
Boarding kennels housing 20 dogs with outside runs facing eastwards screened along southern and northern elevations by 1.5 metre walls.

Dwelling A situated 400 metres to the south west where background noise level is 37 LA 90T.

Dwelling B situated 400 metres to the north east besides a road where background noise level is 40 LA 90T.

Stage 1	Dwelling A LA 90 T = 37 Dwelling B LA 90 T = 40						
Stage 2	Number of dogs 20 x 0.6 = 12						
Stage 3 (D1)	Hz	125	250	500	1	2	LA eq T
	1 Dog	26.0	38.5	60.9	63.1	55.4	65.6
	12 Dogs	+10.8	+10.8	+10.8	+10.8	+10.8	
		36.8	49.3	71.7	73.9	66.2	76.4
Stage 4 (D2)	400m (hard)	-32	-32	-32	-32	-32	
		4.8	17.3	39.7	41.9	34.2	44.4
Stage 5/6 (D3)	1.5m Screen (20m source point)	-5	-6	-7	-7	-8	
		0.2	11.3	32.7	34.9	26.2	37.3
Stage 7	Prevailing wind correction for Dwelling B Specific noise level (37) + correction (3) = 40 LA eq T						
Stage 8	Dwelling A Specific noise level (37) - background level (37) = 0 Dwelling B Specific noise level (40) - background level (40) = 0						

BOARDING KENNELS (20 DOGS)



Case Study 2

Breeding kennels having 8 adult dogs with outside runs facing over open fields to the south.

Dwelling A situated 150 metres to the north east of the kennel block where background noise level is 46 LA 90T.

Stage 1	Dwelling A LA 90 T = 46						
Stage 2	Number of dogs 8 + (25% Pups) 2 = 10 x 0.5 = 5						
Stage 3 (D1)	Hz	125	250	500	1	2	LA eq T
	1 Dog	26.0	38.5	60.9	63.1	55.4	65.6
	5 Dogs	+7	+7	+7	+7	+7	
		33.0	45.5	67.9	70.1	62.4	72.6
Stage 4 (D2)	150m (hard)	-23	-23	-23	-23	-23	
		10.0	22.5	44.9	47.1	39.4	49.6
Stage 5/6 (D3)	2m Kennel Block (10m source point)	-6	-7	-8	-9	-12	
		4	15.5	36.9	38.1	27.4	40.6
Stage 7	Prevailing wind correction for Dwelling A Specific noise level (41) + correction (3) = 44 LA eq T						
Stage 8	Dwelling A Specific noise level (44) - background level 46 = -2						

BREEDING KENNELS (8 ADULT DOGS)

