Appendix 17.2

Baseline Noise Survey Report



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1 Baseline Noise Survey

1.1 Introduction

- 1.1.1 This Appendix reports the measured baseline noise levels along the section of the A9 between Glen Garry and Kincraig prior to the commencement of any physical works in relation to the proposed dualling of the existing trunk road.
- 1.1.2 The survey has been carried out in accordance with applicable British Standards and UK Department of Environment document '*Calculation of Road Traffic Noise*' for the assessment of the existing noise levels, together with BS 7445-1: 2003 '*Description and measurement of environmental noise Part 1 Guide to quantities and procedures*'.
- 1.1.3 This report presents the results of the ambient noise survey.

1.2 Baseline Survey Equipment

- 1.2.1 The following equipment was used for all of the surveys:
- 1.2.2 The long term noise surveys, undertaken for periods of 24 hours or more, were undertaken using a 01dB Blue Solo Sound Level Meter (serial number 61046) with a 01dB Pre 21S Pre-amplifier (serial number 16016) and a 01dB MCE212 ½" microphone (serial number 142693). The meter was calibrated using a Castle GA607 Sound Level Calibrator (serial number 035748).
- 1.2.3 The meter and calibrator have been calibrated in an National Physical Laboratroy (NPL) accredited laboratory within the past year and the details are shown in **Table 1** below:
 - Table 1:
 Sound Level Meter Details and Calibration References and Dates Long Term Meter

Equipment	Serial Number	NPL Calibration Certificate Number	UKAS/ NPL Calibration Certificate Reference	Last Calibration Date
01dB Blue Solo Sound Level Meter	61046	01655/4	0801	24/01/2014
Castle GA607 Acoustic Calibrator	035748	035748/61288	S6312/07428	09/05/2014

- 1.2.4 The shortened period noise surveys were undertaken using a Castle Pro-DX Vocis GA131M Sound Level Meter (serial number 0062925) with a Castle MKDXP Pre-amplifier (serial number 1026) and a Castle ½" microphone (serial number 5035). The meter was calibrated using a Castle GA607 Sound Level Calibrator (serial number 035748).
- 1.2.5 The meter and calibrator have been calibrated in an NPL accredited laboratory within the past year and the details are shown in **Table 2** below.

Table 2:	Sound Level Meter Details and Calibration References and Dates – Short Term Meter
10010 2.	

Equipment	Serial Number	NPL Calibration Certificate Number	UKAS/ NPL Calibration Certificate Reference	Last Calibration Date
Castle Vocis M Sound Level Meter	0062925	0062925/61288	S6312	09/09/2014
Castle GA607 Acoustic Calibrator	035748	035748/61288	S6312/07428	09/05/2014



- 1.2.6 It should be noted that the meter was calibrated before and after each measurement to check for 'drift' in the accuracy of the meter. No drift in the calibration level of the meter was found at any time.
- 1.2.7 Noise measurements were taken in accordance with the methodology in British Standard 7445-1: 2003 'Description and measurement of environmental noise Part 1 Guide to quantities and procedures', with the microphone between 1.2 and 1.5m above local ground level. All measurement locations were also at least 3.5m away from any reflecting surface, and as a result it can be considered that all measurement locations were 'free-field'.

1.3 Baseline Measurement Locations

- 1.3.1 Prior to the commencement of the baseline noise measurement works, consultation took place with Mr R Murdoch, Environmental Health Officer for Highland Council for the area.
- 1.3.2 The locations proposed to be used were identified beforehand and were in the main agreed, or relocated slightly to accommodate the discussions. In the main the measurement locations have remained the same, although a couple have been relocated to reflect access or security issues, although it is considered that the baseline in the vicinity of the A9 within this section of its route has been appropriately captured.
- 1.3.3 The A9 was considered to be freely flowing during all attended (i.e. 3 hour) surveys. For the unattended surveys this cannot be verified, but on setup and collection it was noted that the A9 was freely flowing.
- 1.3.4 Also, on most days when the unattended measurements were being undertaken the surveyor was in the area performing the attended measurements.
- 1.3.5 It should be noted that during all measurements the Average Speed Cameras (ASC) on the A9 were installed but were not yet operational, as such the measurement results represent typical road traffic noise conditions.
- 1.3.6 The results are presented in **Table 3** below:
- 1.3.7 The location of the measurements are indicated in **Figure 1**.



ID Number	Location	Measurement Duration	GPS Location for Measurement
MP1	Station House, Dalnaspidal, Pitlochry	3 Hr	NN64450 BNG73353
MP2	Balsporran Cottages, Dalwhinnie	24 Hr	NN62711 BNG79196
MP3	Drumochter Lodge, Dalwhinnie	3 Hr	NN63065 BNG79591
MP4	Loch Ericht Hotel, Dalwhinnie	3 Hr	NN63812 BNG84953
MP5	2, Truim View, Dalwhinnie	24 Hr	NN63693 BNG84335
MP6	Willet Cottage, Cuaich, Dalwhinnie	24 Hr	NN65573 BNG87071
MP7	Crubenmore Lodge, Newtonmore	3 Hr	NN67513 BNG91014
MP8	Invernahavon Caravan Park, Glentruim	3 Hr	NN68851 BNG94972
MP9	Ptarmigan Lodge, West Ralia	3 Hr	NN70467 BNG97075
MP10	Upper Nuide, Newtonmore	3 Hr	NN72837 BNG98471
MP11	Ruthven Farm House, Kingussie	3 Hr	NH75924 BNG00628
MP12	The Spinney, Spey Street, Kingussie	24 Hr	NH75948 BNG00558
MP13	Craig-An-Darach, Kingussie	24 Hr	NH76415 BNG00997
MP14	Three Bridges, Kingussie	3 Hr	NH77045 BNG01207
MP15	Kerrow Cottage, Kingussie	3 Hr	NH76635 BNG01227
MP16	Croila Road, Kingussie	3 Hr	NH76321 BNG01156
MP17	Ard Dalle, Lynchat, Kingussie	24 Hr	NH78148 BNG01832
MP18	Mains of Balavil, Kingussie	24 Hr	NH79025 BNG02279
MP19	Balavil House, Kingussie	3 Hr	NH79087 BNG02609
MP20	Dunachton Lodge, Kingussie	3 Hr	NH82237 BNG04734
MP21	Silverwood, Dunachton Road, Kincraig	24 Hr	NH82824 BNG05536
MP22	17, Suidhe Crescent, Kincraig	3 Hr	NH83251 BNG06015
MP23	The Old Manse, Alvie Estate, Kincraig	24 Hr	NH83485 BNG06506

Table 3: Baseline Noise Measurement Locations



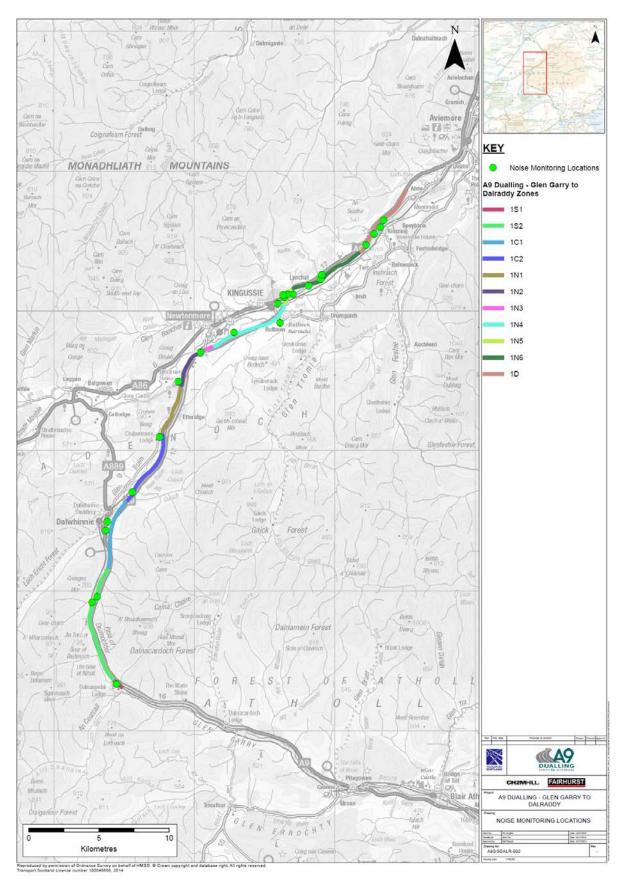


Figure 1: Noise Measurement Locations



1.4 Baseline Noise Survey Results

1.4.1 A summary of the results of the baseline survey are recorded in **Table 4** below.

 Table 4:
 Summary of Measured Baseline Noise Levels

Location	Measurement Duration	$L_{Aeq,T} dB$	L _{А10,T} dB 61.3	
MP1, Station House	3 Hr	57.5		
MD2 Delegence Cottones	06:00 - 24:00	57.4	59.6	
MP2, Balsporran Cottages	00:00 - 06:00	51.0	55.5	
MP3, Drumochter Lodge	3 Hr	58.8	63.6	
MP4, Loch Ericht Hotel	3 Hr	50.6	52.8	
	06:00 - 24:00	46.0	47.9	
MP5, 2 Truim View	00:00 - 06:00	38.6	42.3	
	06:00 - 24:00	55.5	57.7	
MP6, Willet Cottage	00:00 - 06:00	49.2	53.3	
MP7, Crubenmore Lodge	3 Hr	50.3	53.4	
MP8, Invernahavon Caravan Park	3 Hr	44.7	47.0	
MP9, Ptarmigan Lodge	3 Hr	61.3	60.4	
MP10, Upper Nuide	3 Hr	49.4	54.3	
MP11, Ruthven Farm House	3 Hr	50.9	55.3	
MD40. The Origen	06:00 - 24:00	50.3	47.8	
MP12, The Spinney	00:00 - 06:00	39.2	42.7	
ND40 Orain An Danash	06:00 - 24:00	52.0	54.6	
MP13, Craig-An-Darach	00:00 - 06:00	45.9	50.2	
MP14, Three Bridges	3 Hr	53.2	57.3	
MP15, Kerrow Cottage	3 Hr	52.8	57.6	
MP16, Croila Road	3 Hr	45.9	42.1	
	06:00 - 24:00	52.0	54.2	
MP17, Ard Dalle	00:00 - 06:00	49.7	50.2	
	06:00 - 24:00	61.6	65.8	
MP18, Mains of Balavil	00:00 - 06:00	56.7	60.0	
MP19, Balavil House	3 Hr	54.7	59.0	
MP20, Dunachton Lodge	3 Hr	55.1	59.4	
MD24 Silverwood	06:00 - 24:00	55.5	58.9	
MP21, Silverwood	00:00 - 06:00	49.1	53.1	
MP22, 17 Suidhe Crescent	3 Hr	54.3	58.7	
MD22 The Old Manage	06:00 - 24:00	55.3	57.4	
MP23, The Old Manse	00:00 - 06:00	52.5	54.6	

1.4.2 Full Measurement record sheets are provided at the end of this Appendix.

1.4.3 Given the above measured noise levels, together with the guidance provided on the correction of shortened measurements contained within *'Calculation of Road Traffic Noise'*, **Table 5** reports the measured and subsequently corrected L_{A10,18hr} noise levels for each of the measurement



locations. It should be noted however that the 3 hour measurements taken are just that; an individual measurement with a statistical average of the 3 measurements. Therefore the procedure described in CRTN was not strictly followed. However, from observations made by the surveyor it is not considered likely that this will have resulted in any significant difference in the reported noise levels, and if required the shortened measurement procedure could be relied upon to provide an approximation to the 18-hour value.

Location	L _{A10,18h} dB			
Station House, Dalnaspidal, Pitlochry	60.3			
Balsporran Cottages, Dalwhinnie	59.6			
Drumochter Lodge, Dalwhinnie	62.6			
Loch Ericht Hotel, Dalwhinnie	51.8			
2, Truim View, Dalwhinnie	47.9			
Willet Cottage, Cuaich, Dalwhinnie	57.7			
Crubenmore Lodge, Newtonmore	52.4			
Invernahavon Caravan Park, Glentruim	46.0			
Ptarmigan Lodge, West Ralia	59.4			
Upper Nuide, Newtonmore	53.3			
Ruthven Farm House, Kingussie	54.3			
The Spinney, Spey Street, Kingussie	47.8			
Craig-An-Darach, Kingussie	54.6			
Three Bridges, Kingussie	56.3			
Kerrow Cottage, Kingussie	56.6			
Croila Road, Kingussie	41.1			
Ard Dalle, Lynchat, Kingussie	54.2			
Mains of Balavil, Kingussie	65.8			
Balavil House, Kingussie	58.0			
Dunachton Lodge, Kingussie	58.4			
Silverwood, Dunachton Road, Kincraig	58.9			
17, Suidhe Crescent, Kincraig	57.7			
The Old Manse, Alvie Estate, Kincraig	57.4			

Table 5: Measured or Corrected LA10,18h, dB noise levels

1.5 Discussion

- 1.5.1 A detailed baseline noise assessment has been carried out along the route of the proposed dualling of the A9 Trunk Road between Glen Garry and Kincraig. This revealed a relatively stable noise environment in the vicinity, punctuated by other sources. Examples of this, which are not reflected in the measured results, could be found in Dalwhinnie, adjacent to the Loch Ericht Hotel measurement location.
- 1.5.2 In this vicinity, a construction contractor's compound operates, connected to the upgrade of high tension power lines in the area. Noise levels associated with these activities were apparent, but other activities from this site, which involved the use of a helicopter, did not occur in the vicinity whilst the measurements were being taken, although they were observed as taking place during other survey periods.



- 1.5.3 This is a clear indication that noise levels can be cyclical and can vary from hour to hour or day to day. Another example is the overflight by military aircraft, which is a regular but not necessarily daily occurrence in this vicinity.
- 1.5.4 Nonetheless it is considered that the data presented in this report forms a valid report of the ambient noise levels in the vicinity of the proposed A9 works, taken at locations which are considered to be representative of a number of areas along the section of the route between Glen Garry and Kincraig.
- 1.5.5 Given the above it is considered that the data contained within this report forms a suitable basis for the consideration of potential construction noise impacts of the proposed dualling operations, and is also suitable to be used for the verification of modelled noise levels for the dual carriageway once it is constructed and operational.

1.6 Noise Measurement Record Sheets

1.6.1 This section presents the measurement record sheets for each measurement location, including photographs of each location.



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Project	A9 Baseline Noise Asse	Baseline Noise Assessment Date 16-Sep-2014							
Measurement Location	MP1 - Station House, I	Dalnaspidal		1	By	IS			
Source(s) Description	Road Traffic on A9 and	toad Traffic on A9 and noise from passage of trains on Highland Main Line							
Equipment									
Sound Level Meter	Castle Pro-DX Vocis M	EGA131		Serial No.	0062925	(Cal. Date	9-May-2014	
Microphone	Castle 1/2"			Serial No.	1026	(Cal. Date	9-Map-2014	
Preamplifier	Cartle MKDXP			Serial No.	5035		Cal. Date	9-May-2014	
Field Calibrator	Cartle GA607		_	Serial No.	035748		Cal. Date	9-Map-2014	
Initial Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	16-Sep-201	14	Time	10:10	
Final Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	16-Sep-2014		Time	13:12	
Measurement Location(s)		•	•					
Description	To A9 side of residentia	o A9 side of residential location at former station site Height above ground 1.25 m							
GPS Coordinates	NN64450 BNG73353		Bearing to source	North East		Distance to source		50.00 m	
Vertical Refl. Surface(s)	None					Distance to s	surface	- m	
Sketch/ Photographs									



D Measured 0 - 1 m/s Equipment Details:			Salva Winds	Silva Windwatch						
13 Estimated		Select: Force		m/s Description		n	Condition	8		
(Beaufort Scale)			0	0	<0.3	Calm		Calm. Smol	ke rises verti	ically.
		1	βX]	1	0.3-1.5	Light air		Wind motion visible in smoke.		
			0	2	1.5-3.3	Light breez		Wind felt o	n exposed si	kin. Leaves rustle.
			0	3	3.3-5.5	Gentle bree	20	Leaves and	smaller twig	g in constant motion.
			C)	4	5.5-8.0	Moderate breeze		Dust and loose paper raised. Small branches begin to mov		
			0	5	8.0-10.8 Fresh breeze Branches of a moderate size move. Small			size move. Small trees begin to sway.		
Wind Direction	n	Westerly	r		Conditions:		[]Fog		[] Frost	[X] Other: Cloud
Temperature		10-16°C	1				[] Rain /	Snow	[] Sun	
Measured N	oise Levels									
Location	Date	Time	&1	Duration	Lang	LaMan	LaMa	Lass	LAB	Notes
Dalnaspidal Station	16/09/2014	10:1	0-3	3 hours	57.5	78.2	36.6	45.8	61.3	See Below

Road Traffic Noise on the A9, passage of passenger trains on the Highland Main Line, overflights by aircraft including low flying military aircraft and activities associated with the nearby estate.



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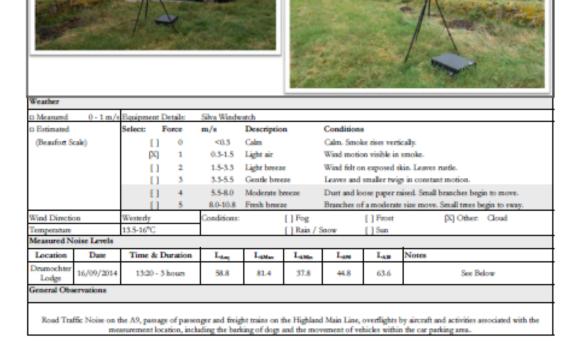
											16-Sep-2014
Peoject		A9 Baselin	e Noise Ass	HISTORIA C						Date	10-040-0014
leasurement	Location	MP2 - Ball	spoman Cot	lages						By	IS
iousce(s) Dee	scription	Road Traff	ic on A9 an	d noise from j	passage of tr	sins on Hig	bland Main L	ine			
iquipment											
ouad Level)	Meter	OldB Blue	Solo				Serial No.	61046		Cal Date	24-Jan-2014
ticrophone		OLDB MCE	212				Serial No.	142693		Cal Date	24-Jan-2014
reamplifier		OldB Pee 2	15				Serial No.	16016		Cal Date	24-Jan-2014
ield Calibrat	tor	Carde GA	507				Serial No.	035748		Cal Date	9-May-2014
nitial Calibra	tion Level	94.0dB	@1000Hz	Comection	0.2dB		Date	16-Sep-2014		Time	0950
inal Calibrat	ion Level	94.0dB	@1000Hz	Comection	0.2dB		Date	18-Sep-20	14	Time	10:00
fe artirenen	t Location(s)										
escription		B&B/Resi	dential Local	tion Near Da	anochter Su	amit betwe	en A9 & Rail	WAY	Height abo	ve ground	1.25 m
iPS Coordin	ates		BNG79196		Bearing to		East		Distance to		130.00 m
ertical Refl.		None							Distance to		- m
ketch/ Phot											-
Street, 1	and the second	le de la		-					-		100
											F
											F
Measured		Equiperent		Sêva Windw							
Meanared		Select:	Force	m/s	Descriptio		Conditions				
Measured	(cdr)	Select:	Force 0	m/e <0.3	Descriptio Calm	•	Calm. Smol	ke zises vezt			
Meanand Estimated (Beaufort S	icale)	Select:	Force 0 1	m/s <0.3 0.3-1.5	Descriptio Calm Light air		Calm. Smol Wind motio	ke rises vert on visible in	smoke.		
Meanured Estimated (Beaufort S Based on ob local weather	e reports and	Select:	Force 0 1 2	m/s <0.3 0.3-1.5 1.5-3.3	Descriptio Calm Light air Light bases		Calm. Smol Wind motic Wind felt o	ke rises vert in visible in n exposed s	smoke. kin. Leaves r		
Measured Estimated (Beaufort S Based on ob local weather	bservation of	Select:	Force 0 1 2 3	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5	Descriptio Calm Light air Light bases Geatle bess	8	Calm. Smol Wind motio Wind felt of Leaves and	ke rises vert on visible in n exposed s smaller twig	smoke. kin. Leaves p gs in constant	t motion.	
Meanared Estimated (Beaufort S Based on ob local weather	e reports and	Select:	Force 0 1 2 3 4	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0	Descriptio Calm Light air Light bases Geatle bess Moderate b	z 128 44628	Calm. Smol Wind motio Wind felt or Leaves and Dust and lo	ke rises vert on visible in n exposed s smaller twi ose paper r	smoke. kin. Leaves p gs in constant aised. Small b	t motion. beanches beg	
Meanured Estimated (Beaufort 3 Based on ob local weathe comments f	e reports and from resident	Select:	Force 0 1 2 3	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8	Descriptio Calm Light air Light bases Geatle bess	20 200 200 200 200 200 200 200 200 200	Calm. Smol Wind motio Wind felt or Leaves and Dust and lo	ke rises vert on visible in n exposed s smaller twig ose paper s f a moderat	smoke. kin. Leaves p gs in constant aised. Small b	t motion. beanches beg Small trees b	egia to sway.
Meanured Estimated (Beaufort 5 Based on ob local weathe comments f	e reports and from resident	Select:	Force 0 1 2 3 4	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0	Descriptio Calm Light air Light bases Geatle bess Moderate b	e cocze te []Pog	Calm. Smol Wind motio Wind felt or Leaves and Dust and lo Branches of	ke rises vert on visible in n exposed s smaller twi tose paper o f a moderati [] Frost	emoke. kin. Leaves p gs in constant aised. Small b e size move. 2	t motion. beanches beg Small trees b [X] Other:	egia to sway. Cloud
Meanwed Estimated (Beaufort 5 Based on ob local weather comments f Vind Directia 'emperature	oservation of e reports and from resident	Select:	Force 0 1 2 3 4	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8	Descriptio Calm Light air Light bases Geatle bess Moderate b	20 200 200 200 200 200 200 200 200 200	Calm. Smol Wind motio Wind felt or Leaves and Dust and lo Branches of	ke rises vert on visible in n exposed s smaller twig ose paper s f a moderat	emoke. kin. Leaves p gs in constant aised. Small b e size move. 2	t motion. beanches beg Small trees b [X] Other:	egia to sway.
Meanared Estimated (Beaufort 5 Based on ob local weather comments f Vind Direction Compensation Resourced N	oservation of e reports and from resident on	Select:	Porce 0 1 2 3 4 5	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8	Descriptio Calm Light air Light bases Gentle base Moderate b Fresh bases	e ceeze te [] Pog [] Rain / :	Calm. Smol Wind motio Wind felt or Leaves and Dust and lo Branches of Snow	be rises vert on visible in n exposed i smaller tuig ose paper s f a moderati [] Frost [] Sun	emoke. kin. Leaves n 25 in constant aised. Small b e size move. 5 Dvizzle in b	t motion. beanches beg Small trees b [X] Other:	egia to sway. Cloud
Meanared Estimated (Beaufort 5 Based on ob local weather comments f Vind Direction responses fearured N	oservation of e reports and from resident	Select:	Force 0 1 2 3 4	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8	Descriptio Calm Light air Light bases Geatle bess Moderate b	e cocze te []Pog	Calm. Smol Wind motio Wind felt or Leaves and Dust and lo Branches of	ke rises vert on visible in n exposed s smaller twi tose paper o f a moderati [] Frost	emoke. kin. Leaves p gs in constant aised. Small b e size move. 2	t motion. beanches beg Small trees b [X] Other:	egia to sway. Cloud
Based on of local weather	oservation of e reports and from resident on	Select: [1] [3] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1	Porce 0 1 2 3 4 5 Duration 500 - 0000	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8 Conditions: L _{3ing} 57.4	Descriptio Calm Light air Light based Gentle base Moderate b Fresh based Resh based 87.6	e 126 16 [] Fog [] Rain / : L _{MMa} 27.4	Calm. Smol Wind motic Wind felt o Leaves and Dust and lo Branches of Snow 43.1	ke rises vert on visible in a exposed is smaller twig core paper i f a modeati [] Frost [] Sun [] Sun [] Sun [] Sun	emoke. kin. Leaves n 25 in constant aised. Small b e size move. 5 Dvizzle in b	t motion. beanches beg Small trees b [X] Other:	egia to sway. Cloud nearmement
2 Meanued 2 Estimated (Beaufort 5 Based on ob local weather comments f Wind Directif Compression Meanued N Location Balaporean	oservation of rereports and from resident on loise Lavels Date 16/09/2014 -	Select: [1] [3] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1	Porce 0 1 2 3 4 5 Duration	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8 Conditions: L _{3ing} 57.4	Descriptio Calm Light air Light breez Gentle breez Moderate b Fresh breez	e cecze te [] Pog [] Rain / : L _{AMIn}	Calm. Smol Wind motic Wind felt or Leaves and Dust and lo Branches of Snow	ke rises veet on visible in n exposed s smaller twig cose paper o f a moderato [] Frost [] Sun Lan	emoke. kin. Leaves n 25 in constant aised. Small b e size move. 5 Dvizzle in b	t motion. beanches beg Small trees b [X] Other: ast hour of s	egia to sway. Cloud acessurement

Road Traffic Noise on the A9, passage of passenger and freight trains on the Highland Main Line, overflights by aircraft including low flying military aircraft and activities at the property. Last hour of measurements affected by light rain/deizzle which resulted in a damp road surface on the A9.



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3 - Dramochter Lod d Traffic on A9 and		oassage of trains on Hi	obland Main L		By	IS		
d Traffic on A9 and	noise from p	assage of trains on Hi	obland Main L					
		Road Traffic on A9 and noise from passage of trains on Highland Main Line						
de Pro-DX Vocis M	(GA131		Serial No.	0062925	Cal. De	ste 9-May-2014		
de 36°			Serial No.	1026	Cal. Dr	ste 9-May-2014		
de MKDXP			Serial No.	5035	Cal. Da	ste 9-May-2014		
de GA607			Serial No.	035748	Cal. Dr	ste 9-Map-2014		
dB @1000Hz	Correction	0.2dB	Date	16-Sep-201	4 Time	13:20		
dB @1000Hz	Correction	0.2dB	Date	16-Sep-201	4 Time	16:25		
		•		•	•	·		
19 side of building					Height above grout	ad 1.25 m		
63065 BNG79591		Bearing to source	West	West Distance #		55.00 m		
Je					Distance to surface	- m		
	de 16" de MKDXP de GA607 dB @1000Hz	de 36" de MKDXP de GA607 dB @1000Hz Correction dB @1000Hz Correction A9 side of building 63065 BNG 79591	de %* de MKDXP de GA607 dB @1000Hz Correction 0.2dB dB @1000Hz Correction 0.2dB A9 side of building 63065 BNG79591 Bearing to source	de %* Serial No. de MKDXP Serial No. de GA607 Serial No. dB @1000Hz Correction 0.2dB Date dB @1000Hz Correction 0.2dB Date A9 side of building 63065 BNG 79591 Bearing to source West	de %* Serial No. 1026 de MKDXP Serial No. 5035 de GA607 Serial No. 035748 dB @1000Hz Correction 0.2dB Date 16-Sep-201 dB @1000Hz Correction 0.2dB Date 16-Sep-201 A9 side of building 63065 BNG79591 Bearing to source West	de %* Serial No. 1026 Cal. Da de MKDXP Serial No. 5035 Cal. Da de GA607 Serial No. 5035 Cal. Da dB @1000Hz Correction 0.2dB Date 16-Sep-2014 Time dB @1000Hz Correction 0.2dB Date 16-Sep-2014 Time A9 side of building Height above group 63065 BNG79591 Bearing to source West Distance to source		





ch2m	FAIRHURST
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Project	A9 Baseline Noise Ass	ta smeat				Date	18-Sep-2014		
Measurement Location	MP4 - Car Park of For	MP4 - Car Park of Former Loch Ericht Hotel							
Source(s) Description	Road Traffic on A9 an	d local road a	well as noise from pa	sage of trains	on Highland	i Main Line			
Equipment	•								
Sound Level Meter	Castle Pro-DX Vocis N		Serial No.	0062925	Cal. Date	9-May-2014			
Microphone	Castle 32			Serial No.	1026	Cal Date	9-May-2014		
Preamplifier	Castle MKDXP			Serial No.	5035 Cal Date		9-May-2014		
Field Calibrator	Castle GA607			Serial No.	035748 Cal Date		9-May-2014		
Initial Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	18-Sep-201	4 Time	09:55		
Final Calibration Level	94.0dB @1000Hz	Correction	0.2dB	Date	18-Sep-201	4 Time	16:20		
Measurement Location()	9								
Description	To A9 side of building	on southern	ide of Dalwhinnie			Height above ground	1.25 m		
GPS Coordinates	NN63693 BNG84335		Bearing to source	East	East Dista		380.00 m		
Vertical Refl. Surface(s)	None					Distance to surface	- m		
Charle (The second her									





D Measured	0-25 m/s	Eminere	unt I	at the	Silva Windw	atch					
D Estimated		Select	-	Porce	m/s	Descriptio		Condition			
(Beaufort S	(ske		n'	0	<0.3	Calm	-	Calm. Smol	te daes vert	ically.	
					0.3-1.5	-1.5 Light air		Wind motion visible in smoke. Wind felt on exposed skin. Leaves rastle.			
		[X] 2		2	15-33						
			ñ.	3	33-55	Gentle bree				gs in constant motion.	
			ň	4	5.5-8.0	Moderate bereze		Dust and loose paper nised. Small branches begin to move.			
			n.	5	8.0-10.8	Fresh breez		Branches of	f a moderat	e size move. Small trees begin to sway.	
Wind Directs	-	Southern	7		Conditions:		[]Fog		[] Frost	[X] Other Gloud	
Tempenture		13.5-16%	с		1		[]Rain/	Snow	[]Sun	Occasional Light Drizzle	
Measured N	oise Levels										
Location	Date	Time	& I.	huration	Later	Lane	LaMa	Lan	LAD	Notes	
Loch Ericht Hotel Car Park	18/09/2014	10:0	0-3	houn	50.6	73.3	43.4	45.0	52.8	See Below	
General Obs	ervations						•			•	

ion sources include the passage of passenger trains on the Highland Main Line, overflights by aircraft and activities associated with the Beauly-Denny power line works which has been in place for several wars.



ch2m:	FAIRHURST
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roject											
		A9 Baselin	e Noise Asse	and the state					1	Date	18-Sep-2014
essuement	Location	MP5 - 2 Ti	uim View						1	By	15
sacce(s) Des	céption	Road Traff	lic on A9 and	local coad th	arough Dalw	hinnie toget	her with noi	se from pass	age of trains o	on Highland	d Main Line
quipment											
and Level N	Meter	01dB Blue	Salo				Senial No. 61046			Cal. Date	24-Jan-2014
icrophone		014B MCI	212				Serial No.	142693		Cal. Date	24-Jan-2014
emplifier		01dB Pae 2	15				Senial No.	16016		Cal. Date	24-Jan-2014
dd Calibrate	96	Castle GA	607				Serial No.	035748		Cal. Date	9-May-2014
isial Calibra	tion Level	94.048	@1000Hz	Connection	0.248		Date	18-Sep-2014		Time	10:10
ul Calibrati		94.048	@1000Hz	Convection	0.248		Date	19-Sep-201	4	Time	10:15
AMERICA	t Location(s)										•
scription		Front gard	en of unoccu	ppied holida	y home with	deur distan	view of A9		Height above	e ground	1.25 m
S Coordin	abes	NN63812	BNG14953		Bearing to a	lotace	East		Distance to s	solatce	420.00 m
rtical Ref. :	Surface(4)	None							Distance to a	statface	- m
ach/ Photo	ogaphs										•
					-	1000		1	-		
	A PA							1			~
	a second							1			~
Measured		Lapparen		Site Winds			Candition	4			~
Measured		Selects	Force	m/+	Descriptio		Genétries				X
feasured Istimated	(44)	Select:	Force 0	m/s <0.3	Descriptio Calm		Calm. Smol	ke sises verti			~
feasured Intimated Result for Sc		Select:	Force 0 1	m/s -0.5 0.3-1.5	Descriptio Calm Light air		Calm. Smol Wind motic	ke sises verti on visible in	amoke.	4	X
feasured Intimated Reaction: Sc ased on ob	servation of	Select:	Porce 0 1 2	m/s <0.3 0.3-1.5 1.5-3.3	Descriptio Calm Light air Light barea		Calm. Smol Wind motic Wind felt o	ke sises verti on visible in n exposed si	anoke. kin. Leaves na		X
Measured Intimated Beaufort Sc iased on ob	servation of	Select: [] [4] [4] [4]	Ferce 0 1 2 3	n/s -0.3 0.3-1.5 1.5-3.3 3.3-5.5	Descriptio Calm Light air Light barea Gende bare	e 126	Calm. Smol Wind motie Wind felt of Leaves and	ke dises verti on visible in n exposed si smaller trrig	amoke. kin. Leaves su p in constant (notica.	
feasured Intimated Reaction: Sc ased on ob	servation of	Select:	Force 0 1 2 3 4	m/s <0.3 0.3-1.5 1.5-3.3 1.3-5.5 5.5-6.0	Descriptio Calm Light air Light bases Gende base Moderate b	e se encle	Calm. Smol Wind motie Wind felt of Leaves and Dust and k	ke dises verd on visible in a exposed d smiller raig rase paper n	amoke. kin. Leaves cu p in constant ; ised. Small be	motion. ranches beg	
Measured Estimated Deanfort Sc lased on ob local weath	servation of her reports	Select:	Force 0 1 2 3 4	n/s -0.3 0.3-1.5 1.5-3.3 3.3-5.5	Descriptio Calm Light air Light barea Gende bare	e soe eenste te	Calm. Smol Wind motie Wind felt of Leaves and Dust and k	ke dises verti on visible in n exposed d smaller twig tose paper n f a moderate	amoke. kin: Leaves ou 5 in constant (ised: Smill be size move. St	motion ranches beg mail trees b	egia to sway.
feasured Intimated Deanfort Sc ased on ob local weath ad Directio	servation of her reports	Select:	Force 0 1 2 3 4	m/s ~0.3 0.3-1.5 1.5-3.3 1.3-5.5 5.5-8.0 8.0-10.8	Descriptio Calm Light air Light bases Gende base Moderate b	e see see3e se []Fog	Calm. Smol Wind moti- Wind felt o Leaves and Dust and lo Branches o	ke sises verti on visible in n exposed si smaller twig tose paper o f a moderate [] Frost	amoke. kin: Leaves ou 5 in constant (ised: Smill be size move. St	motion. ranches beg	egia to sway.
deseased Intimated Beanfort Sc ased on ob local weath ad Directio apenature	servation of her reports	Select:	Force 0 1 2 3 4	m/s ~0.3 0.3-1.5 1.5-3.3 1.3-5.5 5.5-8.0 8.0-10.8	Descriptio Calm Light air Light bases Gende base Moderate b	e soe eenste te	Calm. Smol Wind moti- Wind felt o Leaves and Dust and lo Branches o	ke dises verti on visible in n exposed d smaller twig tose paper n f a moderate	amoke. kin: Leaves ou 5 in constant (ised: Smill be size move. St	motion ranches beg mail trees b	egia to sway.
feasured forimated hearfort 5c and on ob- local weath ad Direction npenature assured No	nervation of her reports	Select:	Force 0 1 2 3 4	m/s ~0.3 0.3-1.5 1.5-3.3 1.3-5.5 5.5-8.0 8.0-10.8	Descriptio Calm Light air Light bases Gende base Moderate b	e see see3e se []Fog	Calm. Smol Wind moti- Wind felt o Leaves and Dust and lo Branches o	ke sises verti on visible in n exposed si smaller twig tose paper o f a moderate [] Frost	amoke. kin: Leaves ou 5 in constant (ised: Smill be size move. St	motion ranches beg mail trees b	egia to sway.
Meanaed Estimated Beaufort 5c lased on ob- local weath and Direction rependence reasoned No cation > 2, Train	oservation of her reports on oise Levels Date 18/09/2014 -	Select:	Force 0 1 2 3 4 5	m/s <0.3 0.5-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8 Conditions	Descriptio Calm Light air Light barea Gende bare Modeate h Farsh barea	e stee se []Fog []Rain /:	Calm. Smot Wind motis Wind felt o Leaves and Dust and lo Branches of Snow	ke sises verti on visible in n exposed d smaller twig tose paper o f a moderate [] Frost [] Sun	amoke. kin. Leaves na 5 in constant o sized. Smill be size move. Si	motion ranches beg mail trees b [X] Other:	egia to sway. Cloud
Measured Estimated Bearfort Sc Sased on ob- local weath ind Direction superature ensured No- scation o 2, Trains View,	oservation of her reports on oise Levels Date	Select: [] [] [] [] Westedy 10-16°C Time & Daptine (Force 0 1 2 3 4 5 Duration	m/s <0.3 0.5-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8 Conditions	Descriptio Calm Light air Light barea Gende bare Moderate b Parsh barea	e mette e []Fog []Rain / :	Calm. Smol Wind moti Wind felt o Leaves and lo Dust and lo Branches o Snow	ke sises vecti on visible in a exposed d smaller treig ose paper o f a moderate [] Frost [] Sun L _{8.0}	amoke. kin. Leaves na 5 in constant o sized. Smill be size move. Si	motion ranches beg mail trees b	egia to sway. Cloud
Meanard Estimated Bearfort Sc lased on ob- local weath od Direction superature examples and No cation o 2, Trains View, ubwhinnie	oservation of her reports oise Levels Date 18/09/2014 - 19/09/2014 -	Select: [] [] [] [] Westedy 10-16°C Time & Daptine (Ferce 0 1 2 3 4 5 Duration 0600 - 0000	m/s <0.3 0.5-1.5 1.5-3.3 3.5-5.5 8.0-10.8 Conditions L _{4.0} 46.0	Descriptio Calas Light air Light barea Georde bare Moderate h Forsh haves Resch bares 72.3	e see e []Fog []Rain/: 23.1	Calm. Smol Wind motie Wind field of Leaves and Io Branches of Snow Isan 35.0	ke dises verdi on visible in a exposed d småller tvig rote paper o f a moderate [] Frost [] Son I_4.0 47.9	amoke. kin. Leaves na 5 in constant o sized. Smill be size move. Si	motion ranches beg mail trees b [X] Other:	egia to sway. Cloud
local weath ind Direction mpenature ensured No reation o 2, Trains	oservation of her reports oise Levels Date 18/09/2014 - 19/09/2014 -	Select: [] [] [] [] Westedy 10-16°C Time & Daptine (Ferce 0 1 2 3 4 5 Duration 0600 - 0000	m/s <0.3 0.5-1.5 1.5-3.3 3.5-5.5 8.0-10.8 Conditions L _{4.0} 46.0	Descriptio Calas Light air Light barea Georde bare Moderate h Forsh haves Resch bares 72.3	e see e []Fog []Rain/: 23.1	Calm. Smol Wind motie Wind field of Leaves and Io Branches of Snow Isan 35.0	ke dises verdi on visible in a exposed d småller tvig rote paper o f a moderate [] Frost [] Son I_4.0 47.9	amoke. kin. Leaves na 5 in constant o sized. Smill be size move. Si	motion ranches beg mail trees b [X] Other:	egia to sway. Cloud





MP6 - W Road Tr	eline Noise Assessment							Date	19	-Sep-2014
Road Tr	Villet Co	ttage						By	IS	
	raffic on	A9 and	local activity	y together wit	th noise fro	im passage of	f trains on H	ighland Main Line		
01dB B	lue Solo					Serial No.	61046	Cal. D	Date 24	-Jan-2014
01dB M	CE212					Serial No.	142693	Cal. D	Date 24	-Jan-2014
01dB Pr	re 21 S					Serial No.	16016	Cal. D	Date 24	-Jan-2014
Castle G	GA607					Serial No.	035748	Cal. D	Date 9-1	May-2014
94.0dB	@10	00Hz	Correction	0.2dB		Date	19-Sep-201	4 Time	10	:20
94.0dB		00Hz	Correction	0.2dB		Date	20-Sep-201		10	:25
n(s)										
Front fe	nceline o	of estate	workers cot	ttage with cle	ar view of o	elevated A9		Height above grou	und	1.25 m
NN655	73, BNG	87071		Bearing to a	source	East		Distance to source	e	98.00 m
None	None						Distance to surface	oe -	m	
		6	and the second second	And Designed to the other					and the second	
								Å		
m/s Equipm	ent Deta	ıls:	Silva Windw	ratch		ALL OF		Å		
m/s Equipm			Silva Windw m/s			Condition		Å		
								cally.		
	For	æ	m/s	Descriptio		Calm. Smol	ke rises verti			
	Ford	е 0	m/s <0.3	Descriptio Calm Light air		Calm. Smol Wind motio	ke rises verti on visible in	smoke-		
Select:	For [] [X]	e 0 1	m/s <0.3 0.3-1.5	Descriptio Calm Light air Light breez	æ	Calm. Smol Wind motio Wind felt o	ke rises verti on visible in n exposed sl	smoke. kin. Leaves rustle.	081	
Select:	For [] [X]	e 0 1 2	m/s <0.3 0.3-1.5 1.5-3.3	Descriptio Calm Light air Light breez Gentle bree	ie rze	Calm. Smol Wind motio Wind felt o Leaves and	ke rises verti on visible in n exposed sl smaller twig	smoke. kin. Leaves rustle. 5 in constant motio		o more.
Select:	For [] [X] []	0 1 2 3	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5	Descriptio Calm Light air Light breez Gentle bree Moderate b	ie ize vroeze	Calm. Smol Wind motie Wind felt o Leaves and Dust and le	ke rises verti on visible in n exposed sl smaller twig sose paper ri	smoke. kin. Leaves rustle. 5 in constant motio aised. Small branche	es begin to	
Select:	Forc [X] [] [] [] []	e 0 1 2 3 4	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0	Descriptio Calm Light air Light breez Gentle bree Moderate b	ie ize vroeze	Calm. Smol Wind motie Wind felt o Leaves and Dust and le	ke rises verti on visible in n exposed sl smaller twig sose paper ri	smoke. kin. Leaves rustle. g in constant motio aised. Small branch e size move. Small t	es begin to trees begin	to sway.
of 8	For [X] [X] [] [] []	e 0 1 2 3 4	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8	Descriptio Calm Light air Light breez Gentle bree Moderate b	e eze wreeze ze [] Fog	Calm. Smol Wind motie Wind felt o Leaves and Dust and k Branches o	ke rises verti on visible in n exposed sl smaller twig oose paper ri f a moderate	smoke. kin. Leaves rustle. g in constant motio aised. Small branch e size move. Small t	es begin to trees begin	to sway.
of s Westerly	For [X] [X] [] [] []	e 0 1 2 3 4	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8	Descriptio Calm Light air Light breez Gentle bree Moderate b	e eze wreeze ze [] Fog	Calm. Smol Wind motie Wind felt o Leaves and Dust and k Branches o	ke rises verti on visible in n exposed sl smaller twig oose paper ri £ a moderate [] Frost	smoke. kin. Leaves rustle. g in constant motio aised. Small branch e size move. Small t	es begin to trees begin	to sway.
of s Westerly 10-16°C	For: [] [X] [] [] [] [] [] [] [] []	e 0 1 2 3 4 5	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8	Descriptio Calm Light air Light breez Gentle bree Moderate b	e eze wreeze ze [] Fog	Calm. Smol Wind motie Wind felt o Leaves and Dust and k Branches o	ke rises verti on visible in n exposed sl smaller twig oose paper ri £ a moderate [] Frost	smoke. kin. Leaves rustle. g in constant motio aised. Small branch e size move. Small t	es begin to trees begin	to sway.
Select: of westerly 10-16°C tis Time Daytin	For: [] [X] [] [] [] [] [] [] [] [] [] [] [] [] []	e 0 1 2 3 4 5	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8	Descriptio Calm Light sir Light breez Gentle bree Moderate b Fresh breez	e eze oreeze [] Fog [] Rain /	Calm. Smol Wind motis Wind felt o Leaves and Dust and lo Branches o Snow	ke rises verti on visible in n exposed sl smaller twig oose paper ri £ a moderate [] Frost [] Sun	smoke. kin. Leaves rustle. g in constant motio ised. Small branche size move. Small t [X] O Notes	es begin to trees begin	to sway.
Select: of westerly 10-16°C S Time Daytin 014	For: [] [X] [] [] [] [] [] [] [] [] [] [] [] [] []	e 0 1 2 3 4 5	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8 Conditions:	Descriptio Calm Light sir Light breez Gentle breez Moderate b Fresh breez	e eze reeze [] Fog [] Rain /	Calm. Smol Wind motid Wind felt o Leaves and Dust and le Branches o Snow	ke rises verti on visible in n exposed sl smaller twig oose paper ri £ a moderate [] Frost [] Sun	smoke. kin. Leaves rustle. g in constant motio ised. Small branche size move. Small t [X] O Notes	es begin to trees begin)ther: Clo	to sway.
Select: of westerly 10-16°C S Time Daytin 014	Force [] [X] [] [] [] [] [] [] [] [] [] [] [] [] []	e 0 1 2 3 4 5	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8 Conditions: L _{Asq} 55.5	Descriptio Calm Light air Light breez Gentle breez Moderate b Fresh breez Lishter Moderate b Fresh breez 97.0	e eze [] Fog [] Rain / L _{AMin} 22.0	Calm. Smol Wind motis Wind felt o Leaves and Dust and lo Branches o Snow	ke rises verti on visible in n exposed sl smaller twig pose paper ri f a moderate [] Frost [] Sun L _{A10} 57.7	smoke. kin. Leaves rustle. g in constant motio ised. Small branche size move. Small t [X] O Notes	es begin to trees begin)ther: Clo	to sway.
of 8 10- 11- 12- 12- 12- 12- 12- 12- 12- 12- 12	sterly 16°C	Ect: Fore [] [X] [] [] [] [] [] [] [] [] [] [[] 0 [X] 1 [] 2 [] 3 [] 4 [] 5 sterly	lect: Force m/s [] 0 <0.3	lect: Force m/s Description [] 0 <0.3	Image: Section bit is a state of the sectio	Image: Section of the sectio	Image: State of the s	Image: Strength of the	Force m/s Description Conditions [] 0 <0.3



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Project	A9 Baseline	Noise Asse	ssment					Date	18-Sep-2014
Measurement Location	MP7 - Crub	enmore Loc	ige					By	15
Source(s) Description	Road Traffic	e on A9 and	l General Wa	de's Military Road as v	vell as noise fro	om passage o	f trains on F	fighland Ma	in Line
Equipment									
Sound Level Meter	Castle Pro-I	DX Voeis M	I GA131		Serial No.	0062925		Cal. Date	9-May-2014
Microphone	Castle 1/2"				Serial No.	1026		Cal. Date	9-May-2014
Preamplifier	Castle MKD	XP			Serial No.	5035		Cal. Date	9-May-2014
Field Calibrator	Castle GA6	07			Serial No.	035748 Cal. Date		Cal. Date	9-May-2014
Initial Calibration Level	94.0dB	@1000Hz	Correction	0.2dB	Date	18-Sep-2014		Time	09:55
Final Calibration Level	94.0dB	@1000Hz	Correction	0.2dB	Date	18-Sep-201	4	Time	16:20
Measurement Location(s	5)								
Description	To A9 side	of building	on opposite s	ide of Truim Valley		Height a		re ground	1.25 m
GPS Coordinates	NN67513 B	NG91014		Bearing to source	East	Distance to		source	245.00 m
Vertical Refl. Surface(s)	None				•		Distance to	surface	- m
Sketch/ Photographs									



🗆 Mexsured	0 - 1.8 m/s	Equipme	nt D	etails:	Silva Windw	7.tch				
c Estimated		Select:	F	orce	m/s	Descriptio	n	Conditions		
(Beaufort S	cale)	1	[]	0	<0.3	Calm		Calm. Smok	e rises verti	ically.
		1	[]	1	0.3-1.5	Light air		Wind motio	n visible in	smoke.
		L L	X]	2	1.5-3.3	Light breez		Wind felt or	a exposed s	kin. Leaves rustle.
		1	[]	3	3.3-5.5	Gentle bree	ze	Leaves and	smaller twig	gs in constant motion.
		1	[]	4	5.5-8.0	Moderate b	ceeze	Dust and lo	ose paper n	aised. Small branches begin to move.
		1	U.	5	8.0-10.8	Fresh breez	e	Branches of	f a moderate	e size move. Small trees begin to sway.
Wind Directio	011	Westerly			Conditions:		[]Fog		[] Frost	[3] Other: Cloud
Temperature		13.5-16°(С				[] Rain /	Snow	[] Sun	
Measured N	oise Levels									
Location	Date	Time	& D	uration	LAcq	LAMax	LAMin	L. 100	LAD	Notes
Crubenmore Lodge	18/09/2014	13:15	5 - 3	hours	50.3	68.7	37.0	43.7	53.4	See Below
General Obs	ervations	•						•	•	•
							-			a. In addition sources include the passage of
passenger	and meight th	uus da ta	e ruș	puland Ab	un Line, over		nent locatio		octated occ	casional traffic movements to and from the
						THE REAL PROPERTY OF	DEUX 10CMD0			



ch2m:	FAIRHURST
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CN2											
Project		A9 Baseline N	loise Asse	essment						Date	19-Sep-2014
Measurement Lo	ocation	MPS - Invenu	uhavon C	aravan Park						By	15
Source(s) Descri	iption	Local Road to	affic and	activities on s	ite - very little	noise from	n A9 andible				
Equipment											
Sound Level Me	eter	Castle Pro-D3	Vocis N	f GA131			Serial No.	0062925		Cal. Date	9-May-2014
Microphone		Castle ½"					Serial No.	1026		Cal. Date	9-May-2014
Preamplifier		Castle MKDX	P				Serial No.	5035		Cal. Date	9-May-2014
Field Calibrator		Castle GA607					Serial No.	035748		Cal. Date	9-May-2014
Initial Calibration)		Correction	0.2dB		Date	19-Sep-201		Time	10:00
Final Calibration		94.0dB @	1000Hz	Correction	0.2dB		Date	19-Sep-201	4	Time	16:20
Measurement L	Location(s)										
Description		Adjacent to Ca	uravan Pa	uk Site Office					Height abov	ve ground	1.25 m
GPS Coordinate	es	NN68851 BN	G94972		Bearing to se	ource	East		Distance to	source	310.00 m
Vertical Refl. Stu	uface(s)	None							Distance to	surface	- m
ketch/ Photogr	raphs										
-			E.S.	Å					A		
T				4				-/-			
Weather			and	4				-/.			
- Measured	0-1m/s	Equipment D		Silva Window				-/.			
o Measured o Estimated		Select: Fo	orce	m/s	Description		Conditions				
Measured		Select: Fo	orce 0	m/s <0.3	Description Calm		Calm. Smol	æ rises verti			
o Measured o Estimated		Select: Fo [] [X]	orce 0 1	m/s <0.3 0.3-1.5	Description Calm Light air		Calm. Smol Wind motic	æ rises verti m visible in	smoke.		
Measured Estimated		Select: F([] [X] []	0 1 2	m/s <0.3 0.3-1.5 1.5-3.3	Description Calm Light air Light breeze		Calm. Smol Wind motio Wind felt o	æ rises verti en visible in n exposed sl	smoke. kin. Leaves r		
Measured Estimated		Select: P([] [X] [] []	0 1 2 3	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5	Description Calm Light air Light breeze Gentle breez	ze	Calm. Smol Wind motic Wind felt o Leaves and	e rises verti an visible in n enposed si smaller twig	smoke. hin. Leaves r 5 in constant	t motion.	
Measured Estimated		Select: P([] [X] [] [] []	0 1 2 3 4	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0	Description Calm Light air Light breeze Gentle breeze Moderate br	ze zeze	Calm. Smol Wind motio Wind felt o Leaves and Dust and lo	te rises verti on visible in n enposed si smaller twig ose paper n	smoke. kin. Leaves r 5 in constant used. Small b	t motion. aranches beg	
: Measured : Estimated (Beaufort Scale	k)	Select: P([] [X] [] [] []	0 1 2 3	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8	Description Calm Light air Light breeze Gentle breeze Moderate br Fresh breeze	: ze zeze e	Calm. Smol Wind motio Wind felt o Leaves and Dust and lo	e rises verti on visible in n exposed si smaller twig ose paper 17 f a moderate	smoke. kin. Leaves r 5 in constant used. Small b	t motion. aranches beg Small trees b	egin to sway.
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Mexnued Estimated (Bemfort Scale Vind Direction	k)	Select: P([] [X] [] [] []	0 1 2 3 4	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8	Description Calm Light air Light breeze Gentle breeze Moderate br Fresh breeze	: ze zeze e	Calm. Smol Wind motic Wind felt of Leaves and Dust and lo Branches of	e rises verti on visible in n exposed si smaller twig ose paper 17 f a moderate	smoke. kin. Leaves r 5 in constant used. Small b	t motion. aranches beg Small trees b	egin to sway.
Mexnued Estimated (Benufort Scale Vand Direction femperature Measured Nois	k) se Levels	3elect: F([] [X] [] [] [] [] Westedy 14-16°C	0 1 2 3 4 5	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8	Description Calm Light air Light breeze Gentle breeze Moderate br Fresh breeze	ze zeze e []Fog	Calm. Smol Wind motic Wind felt of Leaves and Dust and lo Branches of	e rises verti su visible in n exposed si smaller twig ose paper m f a moderate [] Frost	smoke. kin. Leaves n 5 in constant ised. Small b : size move. S	t motion. aranches beg Small trees b	egin to sway.
Mexnued Estimated (Bemfort Scale Vind Direction	k)	Select: Fo [] [X] [] [] [] Westedy	0 1 2 3 4 5	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8	Description Calm Light air Light breeze Gentle breeze Moderate br Fresh breeze	ze zeze e []Fog	Calm. Smol Wind motic Wind felt of Leaves and Dust and lo Branches of	e rises verti su visible in n exposed si smaller twig ose paper m f a moderate [] Frost	smoke. kin. Leaves r 5 in constant used. Small b	t motion. aranches beg Small trees b	egin to sway.
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Very Little noise from the A9 as the site is somewhat distant, and most of the major sources noted during the survey emanated from site activity such as the movement of cars and canvans on and off site, waste collection and grounds maintenance contractors. Other sources include the passage of trains on the Highland Main Line and overflying aircraft.



Ch2m; FAIRHURST

U 11		21								
Project		A9 Baselin	e Noise Asse	essment - Lot	1				Date	23-Sep-2014
Measurement	Location	MP9 - Pta	migan Lodg						By	15
Source(s) Des	cription	Road traffi	ie on A9 and	local road, m	ovements on	the Highla	nd Main Lin	e and overfli	ght of military aircra	ft
Equipment										
Sound Level 1	Meter	Castle Pro-	DX Vocis M	I GA131			Serial No.	0062925	Cal. Da	nte 9-May-2014
Microphone		Castle ½"					Serial No.	1026	Cal. Da	nte 9-May-2014
Preamplifier		Castle MK	DXP				Serial No.	5035	Cal. Dr	ate 9-May-2014
Field Calibrat	30	Castle GA(507				Serial No.	035748	Cal Da	ate 9-May-2014
Initial Calibra	tion Level	94.0dB	@1000Hz	Correction	0.2dB		Date	23-Sep-201	4 Time	09:55
Final Calibrat		94.0dB	@1000Hz	Correction	0.2dB		Date	23-Sep-201	4 Time	16:25
Measurenen	t Location(s)									
Description				ential lodge a			action		Height above group	ad 1.25 m
GPS Coordin	ates		BNG97075		Bearing to s	ource	South		Distance to source	
Vertical Refl. Sketch/ Phot	17	None							Distance to surface	- <u>m</u>
Weather										
D Measured	0 - 2 m/s	Equipment	t Details:	Silva Windw	atch					
D Estimated		Select:	Force	m/s	Description	n	Conditions	s		
(Beaufort S	cale)			<0.3	Calm			be rises verti	cally.	
	-	Ü		0.3-1.5	Light air			on visible in		
		[X]		1.5-3.3	Light breeze		Wind felt o	n exposed sl	in Leaves rustle.	
		0	3	3.3-5.5	Gentle bree	ze		-	s in constant motion	1.
		[]	4	5.5-8.0	Moderate b	reeze	Dust and lo	ose paper n	ised. Small branches	begin to move.
		D	5	8.0-10.8	Fresh breez		Branches of	f a moderate	size move. Small tre	ees begin to sway.
Wind Directio	20	Westerly		Conditions:		[]Fog		[] Frost		her: Cloud
Temperature		9-12°C		<u> </u>		[] Rain / 9	1007	[] Sun		
Measured N	oise Levels									
Location	Date	Time &	Duration	LAcq	L _{AMax}	LAMia	L _{3.90}	LAID	Notes	
Ptamigan Lodge	23/09/2014	10:00 -	3 hours	61.3	99.3	32.4	39.8	60.4	Se	ee Below
General Obs	ervations								1	
	the A9 and the								passage of trains on me limited residenti	the Highland Main Line, al activity.





destruzement Location MP11 - Ruthren Familhous By 15 conce(1) Description Rood taffic on A9 and local coad, agricultural scientry and overflight of milinary aircraft Gallone Science Provided Science Pro	Project										
Some*() Description Real traffic on A9 and local coal, agointhmal activity and overflight of aniloxy sizend? Spagmann Gamma Level Marc Carde 7to-DX Vocin M GA131 Sead No. 0062025 Cal. Date P-May-2014 Manual Level Marc Carde 7to-DX Vocin M GA131 Sead No. 1056 Cal. Date P-May-2014 Stand No. Carde Ador? Sead No. 1056 Cal. Date P-May-2014 Table Carde CASOT Sead No. 03574 Cal. Date P-May-2014 Table Calencia Verde CASOT Sead No. 03574 Cal. Date P-May-2014 Table Calencia Verde CASOT Sead No. 03574 Table 1055 Table Calencia Partice Marc Verde CASOT Sead No. 102574 Table 1035 Table Calencia Netroscience 0.248 Date Delay 25-69-2014 Table 125 m. Table Calencia Netroscience 0.248 Date Delay 204 Date 25-69-2014 Table Delay 204 Date Date Date Date Dat			A9 Baselin	e Noise Ass	essment					Date	22-Sep-2014
Equipment Image: Control Processing State Procest Processing State Procesing State Processing State Pr	Measurement	t Location	MP11 - Ra	uthven Fami	house					By	IS
Nominal Level Mater Crite Pro-DX Vocis M GA131 Sead No. D002023 Cal. Date PAday-2014 discophone Crite N/I Sead No. 1050 Cal. Date PAday-2014 information Crite N/I Sead No. 5035 Cal. Date PAday-2014 infor Carle GA807 Sead No. 5035 Cal. Date PAday-2014 infor Carle GA807 Sead No. 5035 Cal. Date PAday-2014 infor Carle GA807 Sead No. 5035 Cal. Date PAday-2014 infor Carle GA807 Sead No. 5035 Cal. Date PAday-2014 infor Carle GA807 Date 25-6g-2014 Time 1035 dessurement Location(?) Description Date Sead No. Distance to source 240.00 m Partial Ref. Source(to) Noce Doc Distance to source m Mode Partial Ref. Source(to) Noce Description Conditions Conditions Mode Restarted 0-19 m/c Equipanent Detalic Sire Windwrete <		scription	Road traff	ie on A9 and	l local road, aş	picultural activ	vity and ov	erflight of m	ilitary airerai	t	
discreptione Cut & W Feature is a No. 1026 Cal. Date Mappediate Premptider Cut & MCDOP Secial No. 1035 (Cal. Date Mappediate Cal Cut & MCDOP Secial No. 1035 (Cal. Date Mappediate Cal Cut & MCDOP Secial No. 1035 (Cal. Date Mappediate Cal Cut & MCDOP Secial No. 1035 (Cal. Date Mappediate Cal Cut & MCDOP Secial No. 1035 (Cal. Date Mappediate Cal Cut & MCDOP Secial No. 1035 (Cal. Date Mappediate Cal Cut & MCDOP Secial No. 1035 (Cal. Date Mappediate Cal Cut & MCDOP Secial No. 1035 (Cal. Date Mappediate Mappediate No. 105 (Mappediate Mappediate Mappediate Mappediate No. 105 (Mappediate Mappediate Mappediate Mappediate No. 105 (Mappediate Mappediate Mappediate Percent Ref. Surface(1) No. 105 (Mappediate No. 105 (Mappediate Mappediate Percent Ref. Surface(1) No. 105 (Mappediate No. 105 (Mappediate Mappediate Percent Ref. Surface(1) No. 105 (Mappediate No. 105 (Mappediate Mappediate Percent Ref. Surface(1) No. 105 (Mappediate No. 105 (Mappediate Mappediate Percent Ref. Surface(1) No. 105 (Mappediate No.	Equipment		-								
Premplifier Carde MCDOP Seal No. 903 5 Cal. Date PAdp-2014 ried Calinatora Carde CA607 Sead No. 903 740 Cal. Date PAdp-2014 ried Calinatora MAGB @1000Hz Correction 0.24B Date 22-Sep-2014 Time 9405 rind Calination Level MAGB @1000Hz Correction 0.24B Date 22-Sep-2014 Time 9405 Vestigation In guiden of studentil property representative of group to South of A9 Padget shore ground 1.23 m. Precondination NYH5044 ENGCOCC3 Bening to source North Dataset to source 340.00 m. Precondination NYH5044 ENGCOCC3 Bening to source North Dataset to source 340.00 m. Precondination NYH5044 ENGCOCC3 Bening to source North Dataset to source 340.00 m. Precondination NYH5044 ENGCOCC3 Bening to source North Dataset to source 340.00 m. Precondination NYH5044 ENGCOCC3 Bening to source North Dataset to source 340.00 m. Precondination NYH504 ENGCOCC3 Stating to source North Dataset to source 340.00 m. Precondination NYH504 ENGCOCC3 Stating to source North </td <td>Sound Level</td> <td>Meter</td> <td>Castle Pro-</td> <td>-DX Voeis M</td> <td>4 GA131</td> <td></td> <td></td> <td>Serial No.</td> <td>0062925</td> <td>Cal. Date</td> <td>9-May-2014</td>	Sound Level	Meter	Castle Pro-	-DX Voeis M	4 GA131			Serial No.	0062925	Cal. Date	9-May-2014
Faid Calibrator Cate GA607 Seal No. 035748 Cal. Date Shalp-2014 mind Calibration Level. MAd8 @1000Hz Correction 0.2dB Date 22-Sep-2014 Time 1035 Mind Calibration Level. MAd8 @1000Hz Correction 0.2dB Date 22-Sep-2014 Time 1305 Measurement Location(3) Image of arcidential property representative of group to Sorth of A0 Height shows ground 1.23 m. Period Refl. Surface(1) Nose Bening to source North Distance to source 3400 m. Period Refl. Surface(1) Nose Bening to source North Distance to source 3400 m. Period Refl. Surface(1) Nose Bening to source North Distance to source m. Period Refl. Surface(1) Nose Bening to source North Distance to source m. Period Refl. Surface(1) Nose Bening to source North Distance to source m. Statement 0 - 19 m/s Equipment Dettail: Silve Windowned. Exercited Science Silve Science Silve Science Statement 0 - 19 m/s Equipment Dettail: Silve Windowned. Conditions Conditions Statenation 0 - 19	Microphone		Castle 1/2"					Serial No.	1026	Cal. Date	9-May-2014
niał Chinzion Level 94.08 @1000Hz Conzection 0.248 Date 23-5ep-2014 Tane 09-35 inał Chinzion Level 94.08 @1000Hz Conzection 0.248 Date 23-5ep-2014 Tane 10.05 Brain Chinzion In Braine of an admini property representative of group to South of A9 Height shore ground 1.25 m. 285 Coordinates Natrosci 2000 Date 20-5ep-2014 Tane 10.00 m. 285 Coordinates Natrosci 2000 Date 20-5ep-2014 Dataset to source 2 4000 m. 285 Coordinates Natrosci 2000 Date 20-5ep-2014 Dataset to source 2 4000 m. 286 Coordinates Natrosci 2000 Dataset to source 2 0 m. 286 Coordinates Dataset to source 2 4000 m. 287 Coordinates Dataset to source 2 4000 m. 298 Coordinates Dataset to source 2 4000 m. 298 Coordinates Dataset to source 2 4000 m. 299 Coordinates Dataset to source 2000 m. 299 Coordinates Dataset to source 2000 m. 200 Coordinateset to source 2000 m. 200 Coordinates Dataset to source 2000 m.	Preamplifier		Castle MK	DXP				Serial No.	5035	Cal. Date	9-May-2014
Tail Calibration Level 94:08 @1000Hz Concertion 0.245 Date 22-Sep-3014 Tase 13:05 Measurement Location(s) In grades of anidential property representative of group to South of A0 Height above ground 12.5 m. 2PS Constitute: Name Distance to source 340.00 m. 2PS constitute: Name Distance to source 340.00 m. Period Ref. Southers(s) None Distance to source - m. Linkely Procorphic Distance to source - m. - m. Weather Conservice None - m. - m. Weather Estimated 0 - 1.9 m/s Equipment Detail: Silve Windeworkh 2 Measured 0 - 1.9 m/s Engineent Detail: Silve Windeworkh Conditions 2 Measured 0 - 1.9 m/s Engineent Detail: Silve Windeworkh Conditions 2 Measured 0 - 1.9 m/s Engineent Detail: Silve Windeworkh Conditions 2 Measured 0 - 1.9 m/s Engineent Detail: Silve Windeworkh Conditions 2 Measured 0 - 1.9 m/s Engineent Detail: Silve Windeworkh Co	Field Calibrat	aot	Castle GA	607	_			Serial No.	035748	Cal. Date	9-May-2014
Measurement Location(s) Intermine provide proveption provide provide provide provereprov	Initial Calibra	tion Level	94.0dB	@1000Hz	Correction	0.2dB		Date	22-Sep-201	4 Time	09:55
Description Is guiden of aridential property representative of group to Sorth of A9 Height above ground 1.25 m. EFC Conditation: Note Distance to source 240.00 m. Eventil Ref. Suffice(i) Nose Distance to source 240.00 m. Early Proceeding and Suffice(i) Nose m. Distance to source 240.00 m. Early Proceeding and Suffice(i) Nose m. Distance to source 240.00 m. Early Proceeding and Suffice(i) Nose m. m. m. Early Proceeding and Proce			94.0dB	@1000Hz	Correction	0.2dB		Date	22-Sep-201	4 Time	13:05
PFC Coordinate: NHT5924 BNG00023 Beaing to source North Distance to source 240.00 m Period Ref. Sourface(1) Noce Distance to source 0 m Weith / Photograph: Image: Coordinate in the source of the source	Measurenen	nt Location(s)									
Partical Ref. Sunface(i) Nose Distance to sunface m iterth/Photograph: Distance to sunface m Image: Sunface(i) Nose Distance to sunface m Image: Sunface(i) Nose Image: Sunface(i) Nose m Image: Sunface(i) Nose Image: Sunface(i) Nose m Image: Sunface(i) Sunface(i) Sunface(i) Image: Sunface(i) m Neather Sunface(i) Sunface(i) Sunface(i) Sunface(i) Sunface(i) Image: Sunface(i) Sunface(i) Sunface(i) Description Conditions Conditions Sunface(i) Sunface(i) Sunface(i) Description Conditions Colin Suoke size vertically. [] 1 0.515 Light size Wind motion stille in sunke. [] Sunface(i) Sunface(i) Sunface(i) Sunface(i) Sunface(i) [] Sunface(i) Sunface(i) </td <td>Description</td> <td></td> <td>In gurden</td> <td>of residential</td> <td>l property rep</td> <td>resentative of</td> <td>group to S</td> <td>outh of A9</td> <td></td> <td>Height above ground</td> <td>1.25 m</td>	Description		In gurden	of residential	l property rep	resentative of	group to S	outh of A9		Height above ground	1.25 m
Insteh/ Fibrograph: Insteh Insteh <	GPS Coordin	untes	NH75924	BNG00628		Bearing to se	ousce	North		Distance to source	240.00 m
Weather Standard 0-1.9 m/r Enginanest Details Silva Windowsch Calandard 0-1.9 m/r Enginanest Details Silva Windowsch Calandard Colandard Bestrict Force Difference Nodezate bareze Difference Undowsch Calandard Colandard Difference Nodezate bareze Difference Trave & Solo Difference Conditions Calandard Direction Nodezate bareze Difference Difference Difference Conditions Canadowsie Calandardes of a modecate size more. Difference Calandardes of a modecate size more. Difference Calandardes of a modecate size more. Difference Calandardes of a modecate size more. Canadowsie Calandardes of a modecate size more. C	Vertical Refl.	Surface(s)	None					-		Distance to surface	- <u>m</u>
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Select: Force m/s Description Conditions (Bennfort Scale) [] 0 <0.3 Calm Calm. Smoke rises vertically. [] 1 0.3-1.5 Light air Wind motion visible in smoke. [N] 2 1.5-3.3 Light air Wind motion visible in smoke. [] 3 3.3-5.5 Gentle breeze Leaves and smaller twigs in constant motion. [] 4 5.5-8.0 Moderate breeze Dust and loose paper raised. Small branches begin to move. [] 5 8.0-10.8 Fresh breeze Branches of a moderate size move. Small trees begin to tway. Vind Direction Westedy Conditions: [] Fog [] Frost [X] Other: Vind Direction Westedy Conditions: [] Roin / Snow [] Sun Clearing to Stanthine Measured Noise Levels Image: Standard Stan				Ā			I		A		Series .
Select: Force m/s Description Conditions (Bennfort Scale) [] 0 <0.3 Calm Calm. Smoke rises vertically. [] 1 0.3-1.5 Light air Wind motion visible in smoke. [N] 2 1.5-3.3 Light air Wind motion visible in smoke. [] 3 3.3-5.5 Gentle breeze Leaves and smaller twigs in constant motion. [] 4 5.5-8.0 Moderate breeze Dust and loose paper raised. Small branches begin to move. [] 5 8.0-10.8 Fresh breeze Branches of a moderate size move. Small trees begin to tway. Vind Direction Westedy Conditions: [] Fog [] Frost [X] Other: Vind Direction Westedy Conditions: [] Roin / Snow [] Sun Clearing to Stanthine Measured Noise Levels Image: Standard Stan	Weather								6	A	
(Beamfort Scale) [] 0 <0.3		0.10	T	• Detrile	Cit 1071						
Image: Second	- Measured	0 - 1.9 m/s						Cométrica			
Image: Second state of the second s	 Measured Estimated 		Select:	Force	m/s	Description				nalir	
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[] 4 5.5-8.0 Moderate breeze Dust and loose paper raised. Small branches begin to move. [] 5 8.0-10.8 Fresh breeze Branches of a moderate size move. Small trees begin to sway. Vind Direction Westedy Conditions: [] Fog [] Frost [X] Other: Cloud femperature 7-15°C [] Fog [] Sun Clearing to Sunshine Measured Noise Levels	 Measured Estimated 		Select:	Force] 0] 1	m/s <0.3 0.3-1.5	Description Calm Light air		Calm. Smol Wind motic	ke nises verti on visible in	smoke	
Image: Noise from the A9 which is at grade or in a slight cutting at this location to gether with occasional traffic on the local roads (B970 and an unclassified road wing no name) and some agricultural activity including the use of bird-scarers or shotguns. Measurement also affected by overflight of military aircraft, which is is	 Measured Estimated 		Select:	Force] 0] 1] 2	m/s <0.3 0.3-1.5 1.5-3.3	Description Calm Light air Light breeze		Calm. Smol Wind motio Wind felt o	ke rises verti on visible in n enposed si	smoke. kin. Leaves rustie.	
Wind Direction Westedy Conditions: [] Fog [] Frost [X] Other: Cloud Impenture 7-15°C [] Rain / Snow [] Sun Clearing to Stanshine Measured Noise Levels Impenture [] Rain / Snow [] Sun Clearing to Stanshine Location Date Time & Duration L _{Neq} L _{AMax} L _{AMax} L _{AMax} L _{AMax} Sole Ruthwen Farmhouse 22/09/2014 10:00 - 3 hours 50.9 75.1 36.1 41.8 55.3 See Below General Observations Sole from the A9 which is at grade or in a slight cutting at this location together with occasional traffic on the local roads (B970 and an unclassified road wing no mane) and some agricultural activity including the use of bird-scareers or shotgams. Measurement also affected by overflight of military aircraft, which is a species of shotgams. Measurement also affected by overflight of military aircraft, which is a species of the scareers of shotgams. Measurement also affected by overflight of military aircraft, which is a species of the scareers of shotgams. Measurement also affected by overflight of military aircraft, which is a species of the scareers of shotgams. Measurement also affected by overflight of military aircraft, which is a species of the scareers of the scareers of shotgams. Measurement also affected by overflight of military aircraft, which is and scare scare scareers of the scareers of the scareers of the	 Measured Estimated 		Select: [] [X []	Porce] 0] 1] 2] 3	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5	Description Calm Light air Light breeze Gentle breeze	te	Calm. Smol Wind motic Wind felt o Leaves and	ke rises verti on visible in n exposed si smaller twig	smoke. kin. Leaves rustle. 5 in constant motion.	
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Measured Noise Levels Location Date Time & Duration L _{Maq} L _{MMax} <thl_max}< th=""> <thl_max}< th=""> <thl_max s<="" td=""><td>D Measured D Estimated (Beaufort S</td><td>icale)</td><td>Select: [] [] [] [] [] []</td><td>Porce] 0] 1] 2] 3] 4</td><td>m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8</td><td>Description Calm Light air Light breeze Gentle breeze Moderate br Fresh breeze</td><td>eeze</td><td>Calm. Smol Wind motio Wind felt o Leaves and Dust and lo</td><td>ke rises verti on visible in n exposed si smaller twig sose paper <i>n</i> f a moderate</td><td>smoke. kin Leaves rustle. 5 in constant motion. sised. Small branches be size move. Small trees</td><td>begin to sway.</td></thl_max></thl_max}<></thl_max}<>	D Measured D Estimated (Beaufort S	icale)	Select: [] [] [] [] [] []	Porce] 0] 1] 2] 3] 4	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8	Description Calm Light air Light breeze Gentle breeze Moderate br Fresh breeze	eeze	Calm. Smol Wind motio Wind felt o Leaves and Dust and lo	ke rises verti on visible in n exposed si smaller twig sose paper <i>n</i> f a moderate	smoke. kin Leaves rustle. 5 in constant motion. sised. Small branches be size move. Small trees	begin to sway.
Location Date Time & Duration L _{Meq} L _{MMax}	□ Measured □ Estimated (Benufort S Wind Directi	icale) on	Select: [] [X [] [] [] Westedy	Porce] 0] 1] 2] 3] 4	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8	Description Calm Light air Light breeze Gentle breeze Moderate be Fresh breeze	te teze t	Calm. Smol Wind motic Wind felt o Leaves and Dust and lo Branches of	ke nises verti on visible in n exposed si smaller twig sose paper m f a moderate [] Frost	smoke. kin Leaves rustle. 5 in constant motion. used. Small branches be size move. Small trees [X] Other	begin to sway. Cloud
Ruthwen Farmhouse 22/09/2014 10:00 - 3 hours 50.9 75.1 36.1 41.8 55.3 See Below General Observations Noise from the A9 which is at grade or in a slight cutting at this location together with occasional traffic on the local roads (B970 and an unclassified road wing no name) and some agricultural activity including the use of bird-scatters or shotgams. Measurement also affected by overflight of military aircraft, which is a	 Measured Estimated (Bemfort S Wind Directi Temperature 	icale) on	Select: [] [X [] [] [] Westedy	Porce] 0] 1] 2] 3] 4	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8	Description Calm Light air Light breeze Gentle breeze Moderate be Fresh breeze	te teze t	Calm. Smol Wind motic Wind felt o Leaves and Dust and lo Branches of	ke nises verti on visible in n exposed si smaller twig sose paper m f a moderate [] Frost	smoke. kin Leaves rustle. 5 in constant motion. used. Small branches be size move. Small trees [X] Other	begin to sway. Cloud
Noise from the A9 which is at grade or in a dight cutting at this location together with occasional traffic on the local roads (B970 and an unclassified road wi no name) and some agricultural activity including the use of bird-scarers or shotgans. Measurement also affected by overflight of military aircraft, which is a	Measured Estimated (Beaufort S Wind Directi Temperature Measured N	on Noise Levels	Select: [] [X [] [] Westedy 7-15°C	Force] 0] 1] 2] 3] 4] 5	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8 Conditions:	Description Calm Light air Light breeze Gentle breeze Moderate br Fresh breeze	re reze : []Fog []Rain / S	Calm. Smol Wind motic Wind felt o Leaves and Dust and lo Branches of Snow	ke rises verti on visible in n exposed si smaller twig cose paper r f a moderate []] Frost []] Sun	smoke. kin Leaves rustle. 5 in constant motion. sized. Small branches be size move. Small trees [X] Other Clearing b	begin to sway. Cloud
no name) and some agricultural activity including the use of bird-scarers or shotguns. Measurement also affected by overflight of military aircraft, which is a	 Measured Estimated (Besufort S Wind Directi Temperature Measured N Location 	on Noise Levels Date	Select: [] [] [] [] [] [] [] [] [] []	Force 1 0 1 1 2 2 3 3 4 1 5	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8 Conditions: L _{heq}	Description Calm Light air Light breeze Gentle breeze Moderate bu Fresh breeze L _{AMax}	eeze : []Fog []Rain / S	Calm. Smol Wind motio Wind felt o Leaves and lo Branches of Snow	ke rises verti on visible in n exposed si smaller twig sose paper <i>n</i> f a moderate [] Frost [] Sun L _{A10}	unoke. kin Leaves rustle. 5 in constant motion. ised. Small branches be size move. Small trees [N] Other Clearing to Notes	begin to stway. : Cloud o Sunshine
no name) and some agricultural activity including the use of bird-scarers or shotguns. Measurement also affected by overflight of military aircraft, which is a	Measured Estimated (Bemfort S Wind Directi Temperature Measured N Location Ruthven Farmhouse	on Noise Levels Date 22/09/2014	Select: [] [] [] [] [] [] [] [] [] []	Force 1 0 1 1 2 2 3 3 4 1 5	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8 Conditions: L _{heq}	Description Calm Light air Light breeze Gentle breeze Moderate bu Fresh breeze L _{AMax}	eeze : []Fog []Rain / S	Calm. Smol Wind motio Wind felt o Leaves and lo Branches of Snow	ke rises verti on visible in n exposed si smaller twig sose paper <i>n</i> f a moderate [] Frost [] Sun L _{A10}	unoke. kin Leaves rustle. 5 in constant motion. ised. Small branches be size move. Small trees [N] Other Clearing to Notes	begin to stway. : Cloud o Sunshine
common occurrence.	Measured Estimated (Beaufort S Wind Directi Temperature Measured N Location Ruthwen Farmhouse General Ob:	on Noise Levels Date 22/09/2014 servations	3elect: [[[X] [] [] [] [] [] [] [] [] [] [Force 0 1 2 3 4 5	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8 Conditions: L _{heq} 50.9	Description Colm Light air Light breeze Gentle breeze Moderate br Fresh breeze L _{AMax} 75.1	te reze [] Fog [] Rain / ! L _{AMin} 36.1	Calm. Smol Wind motic Wind felt o Leaves and Dust and lo Branches of Snow 41.8	iz nies verti on visible in n exposed si smaller twig sose paper m f a modemte [] Frost [] Sun L _{N10} 55.3	unoke. kin Leaves rustle. 5 in constant motion. used. Small branches be size move. Small trees [X] Other Clearing to Notes See I	begin to sway. Cloud o Sunshine Selow
	2 Mexnued 2 Estimated (Beaufort 5 Nind Directi Temperature Measured N Location Ruthven Farmhouse General Obs	on Noise Levels Date 22/09/2014 servations the A9 which i	3elect: [] [] [] [] [] [] [] []	Force I 0 1 1 1 2 2 3 1 4 1 5 5	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8 Conditions: L _{heq} 50.9	Description Calm Light air Light breeze Gentle breeze Moderate bo Fresh breeze L _{AMax} 75.1	te eeze [] Fog [] Rain / 3 L _{AMin} 36.1 ther with o hotguns. M	Calm. Smol Wind motic Wind felt o Leaves and Dust and lo Beauches of Snow 41.8 exactional trafferstream feasurement	iz nies verti na visible in n exposed si smaller twig sose paper n f a modente [] Frost [] Sun 55.3 ffic on the lo	unoke. kin Leaves rustle. 5 in constant motion. ised. Small branches be size move. Small trees [N] Other Clearing to Notes See I cal roads (B970 and an	begin to sway. : Cloud o Sunshine Below unclassified soad wi





feasurement Local ource(s) Description Quipment		100 000000000	Noise Asse	ssment						Date	22-Sep-2014
	tion	MP12 - The	e Spinney							By	IS
quipment	ion	Road Traffi	ic on A9 and	d local activity	and noise f	from passag	e of trains on	Highland I	Main Line at th	he end of th	e garden
ound Level Meter		01dB Blue 3	Solo				Serial No.	61046		Cal. Date	24-Jan-2014
ficrophone		01dB MCE	212				Serial No.	142693		Cal. Date	24-Jan-2014
reamplifier		01dB Pre 2	15				Serial No.	16016		Cal. Date	24-Jan-2014
Field Calibrator		Castle GA6	07	_			Serial No.	035748		Cal. Date	9-May-2014
nitial Calibration I	Level	94.0dB	@1000Hz	Correction	0.2dB		Date	22-Sep-20	14	Time	09:50
Final Calibration L	evel	94.0dB	@1000Hz	Correction	0.2dB		Date	23-Sep-20	14	Time	09:25
feasurement Loc	cation(s)										
Description		Residential	garden facir	ig A9 with Hi	ighland Mair	n Line at en	d of garden		Height abov	e ground	1.25 m
GPS Coordinates		NH75948,	BNG00558		Bearing to	source	South		Distance to:	source	500.00 m
/ertical Refl. Surfa	ce(s)	None							Distance to:	surface	- m
ketch/ Photograp	hs										
	and the	all'a			1992	BAR					Contraction of the
Ceather		dia .	275				1	1			
		Environment	Dende	Sileo Winde	arch		4				
Weather		Equipment		Silva Winds			Condition				
Measured Estimated		Select:	Force	m/s	Descriptio	-	Condition		ically.		
Measured		Select:	Force 0	m/s <0.3	Descriptio Calm	m	Calm. Smol	ke rises ver			
Measured Estimated (Beaufort Scale)	ation of	Select: []	Force 0 1	m/s <0.3 0.3-1.5	Descriptio Calm Light air		Calm. Smol Wind motio	ke rises ver on visible ir	smoke.	atte	
Measured Estimated		Select:	Force 0 1 2	m/s <0.3 0.3-1.5 1.5-3.3	Descriptio Calm Light air Light brees	se	Calm. Smol Wind motio Wind felt o	ke rises ver on visible ir n exposed :	smoke. skin. Leaves ru		
Measured Estimated (Beaufort Scale) Based on observa		Select: []	Force 0 1	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5	Descriptio Calm Light air	ie eze	Calm. Smol Wind motio Wind felt o Leaves and	ke rises ver on visible ir n exposed : smaller twi	smoke. skin. Leaves ru gs in constant	motion.	
2 Measured 2 Estimated (Beaufort Scale) Based on observa		Select: []	Force 0 1 2 3	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0	Descriptio Calm Light air Light brees Gentle bree Moderate b	se eze broeze	Calm. Smol Wind motie Wind felt o Leaves and Dust and le	ke rises ver on visible ir n exposed smaller twi ose paper i	a smoke. skin. Leaves ru gs in constant raised. Small b	motion. ranches beg	
2 Measured 2 Estimated (Beaufort Scale) Based on observa local weather re		Select:	Force 0 1 2 3 4	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8	Descriptio Calm Light air Light breez Gentle bree	eze broeze ze	Calm. Smol Wind motie Wind felt o Leaves and Dust and le	ke rises ver on visible ir n exposed : smaller twi tose paper i f a moderat	a smoke. skin. Leaves ru gs in constant raised. Small br te size move. S	motion. ranches beg imall trees b	egin to sway.
Measured Estimated (Beaufort Scale) Based on observa local weather rep Vind Direction		Select: [] [] [X] [] [] [] [] [] [] [] [] [] [] [] [] []	Force 0 1 2 3 4	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0	Descriptio Calm Light air Light brees Gentle bree Moderate b	ce eze breeze ze [] Fog	Calm. Smol Wind motic Wind felt o Leaves and Dust and k Branches o	ke rises ver on visible ir n exposed : smaller twi iose paper : <u>f a moderat</u> [] Prost	a smoke. skin. Leaves ru gs in constant raised. Small b te size move. S	motion. ranches beg imall trees b [X] Other:	egin to sway. Cloud
Measured Estimated (Beaufort Scale) Based on observa local weather rep Vind Direction	ports	Select:	Force 0 1 2 3 4	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8	Descriptio Calm Light air Light brees Gentle bree Moderate b	eze broeze ze	Calm. Smol Wind motic Wind felt o Leaves and Dust and k Branches o	ke rises ver on visible ir n exposed : smaller twi tose paper i f a moderat	a smoke. skin. Leaves ru gs in constant raised. Small b te size move. S	motion. ranches beg imall trees b [X] Other:	egin to sway. Cloud
Measured Estimated (Beaufort Scale) Based on observa local weather re find Direction emperature Icasured Noise I	ports Levels	Select: [] [X] [] [] Westerly 10-16°C	Force 0 1 2 3 4	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8	Descriptic Calm Light air Light breez Gentle bree Moderate h Fresh breez	ce eze breeze ze [] Fog	Calm. Smol Wind motic Wind felt o Leaves and Dust and k Branches o	ke rises ver on visible ir n exposed : smaller twi iose paper : <u>f a moderat</u> [] Prost	a smoke. skin. Leaves ru gs in constant raised. Small b te size move. S	motion. ranches beg imall trees b [X] Other:	egin to sway. Cloud
Measured Estimated (Beaufort Scale) Based on observa local weather re Vind Direction 'emperature Measured Noise I .ocation Date The Spinney, 22 (00)	Levels	Select: [] [] [X] [] [] [] [] [] [] [] Westerly 10-16°C Time &	Force 0 1 2 3 4 5	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8 Conditions:	Descriptio Calm Light air Light brees Gentle bree Moderate b	eze breeze ze [] Pog [] Rain /	Calm. Smol Wind motion Wind felt on Leaves and Dust and lo Branches on Snow	ke rises ver on visible ir n exposed : smaller twi ose paper : f a moderat [] Prost [] Sun	a smoke. skin. Leaves ru gs in constant raised. Small br te size move. S	motion. ranches beg imall trees b [X] Other: Some light o	egin to sway. Cloud drizzle overnigh
2 Measured 2 Estimated (Beaufort Scale) Based on observa local weather reg Wind Direction Comperature Measured Noise I Location Date The Spinney, 22/09	ports Levels	Select: [] [] [X] [] [] [] [] [] [] [] [] [] [] [] [] []	Force 0 1 2 3 4 5 Duration	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8 Conditions: L _{Aeq} 50.3	Descriptic Calm Light air Light breez Gentle bre Moderate b Fresh breez	te eze breeze ze [] Fog [] Rain /	Calm. Smol Wind moti Wind felt o Leaves and Dust and lo Branches o Snow	ke rises ver on visible ir n exposed : smaller twi oose paper i f a moderat [] Frost [] Sun L _{ABD}	a smoke. skin. Leaves ru gs in constant raised. Small br te size move. S	motion. ranches beg imall trees b [X] Other:	egin to sway. Cloud drizzle overnig!
Measured Setimated (Beaufort Scale) Based on observa local weather rep Wind Direction femperature Measured Noise I Location Date The Spinney, 22/0% Spey Street, 23/0	ports Levels 9/2014 - 19/2014	Select: [] [] [X] [] [] [] [] [] [] [] [] [] [] [] [] []	Force 0 1 2 3 4 5 Duration 660 - 0000	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8 Conditions: L _{Aeq} 50.3	Descriptic Calm Light air Light breez Gentle bro Moderate 1 Fresh breez 82.0	ee eze [] Fog [] Rain / L _{AMin} 24.9	Calm. Smol Wind moti- Wind felt o Leaves and Dust and lo Branches o Snow Lave 36.8	ke rises ver n visible ir n exposed : smaller twi iose paper i f a moderal [] Frost [] Sun 47.8	a smoke. skin. Leaves ru gs in constant raised. Small br te size move. S	motion. ranches beg imall trees b [X] Other: Some light o	egin to sway. Cloud drizzle overnig!



Project	A9 Baseline Noise A	sessment				Date	23-Sep-2014
Measurement Location	MP13 - Craig-An-Da	rach				By	I Stanworth
Source(s) Description	Road Traffic on A9 a	nd local traffic	on A86 Kingussie to S	pean Bridge ro	oad, together v	with noise from domes	tic activity
Equipment							
Sound Level Meter	01dB Blue Solo			Serial No.	61046	Cal. Date	24-Jan-2014
Microphone	01dB MCE212			Serial No.	142693	Cal. Date	24-Jan-2014
Preamplifier	01dB Pre 21 S			Serial No.	16016	Cal. Date	24-Jan-2014
Field Calibrator	Castle GA607			Serial No.	035748	Cal. Date	9-May-2014
Initial Calibration Level	94.0dB @1000H	z Correction	0.2dB	Date	23-Sep-2014	Time	09:45
Final Calibration Level	94.0dB @1000H	z Correction	0.2dB	Date	24-Sep-2014	Time	09:45
Measurement Location	(8)						
Description	Residential garden ov	erlooking A9/.	A86 junction			Height above ground	1.25 m
GPS Coordinates	NH76415, BNG0099	7	Bearing to source	South East		Distance to source	180.00 m
Vertical Refl. Surface(s)	None					Distance to surface	- m
Sketch/ Photographs							

Weather									
🗆 Measured		Equipment	Details:	Silva Windw	atch				
Estimated		Select:	Force	m/s	Descriptio	n	Condition	8	
(Beaufort S	cale)	E 1	0	< 0.3	Calm		Calm. Smo	ke rises verti	tically.
		E1	1	0.3-1.5	Light air		Wind moti	on visible in	smoke.
Based on ol	bservation of	[X]	2	1.5-3.3	Light bree:	ze	Wind felt of	on exposed s	skin. Leaves rustle.
local weat	her reports	E 1	3	3.3-5.5	Gentle bre	eze	Leaves and	smaller twig	gs in constant motion.
		E 1	4	5.5-8.0	Moderate	breeze	Dust and le	oose paper n	raised. Small branches begin to move.
			5	8.0-10.8	Fresh bree	ze	Branches of	f a moderate	te size move. Small trees begin to sway.
Wind Directi	on	Westerly		Conditions:		[]Fog		[] Frost	[X] Other: Cloud
Temperature		10-16°C				[] Rain /	Snow	[] Sun	Some light drizzle overnight
Measured N	loise Levels								_
Location	Date	Time &	Duration	LAng	LAMax	LAMin	L.A.90	L.830	Notes
Craig-An- Darach,	23/09/2014 -	Daytime (0600 - 0000	52.0	79.3	18.7	40.4	54.6	See Below
Kingussie	24/09/2014	Night-time	0000 - 0600	45.9	64.4	18.7	25.9	50.2	See Below
General Obs	servations								
					ovements of		ar in and out		ctivity including chickens within smallholds Some overnight rain but location largely d



ch	2 <i>M</i>	FA	IRHU	JRST					Noise Me	easurement Record
Project		A9 Baseline	Noise Ass	ssment					Date	30-Sep-2014
Measurement	Location	MP14 - The							By	15
Source(s) Des				vements on t	he Highland i	Main Line a	nd activity as	round estate		
Equipment			,							
Sound Level 1	Meter	Castle Pro-L	X Voeis M	(GA131			Serial No.	0062925	Cal D	Date 9-May-2014
Microphone		Castle 1/2"					Serial No.	1026	Cil D	ate 9-May-2014
Preamplifier		Castle MKD	XP				Serial No.	5035	Cal D	Date 9-May-2014
Field Calibrate	ac .	Castle GA60	07				Serial No.	035748	Cal D	0ate 9-May-2014
Initial Calibrat			<u> </u>	Correction	0.2dB		Date	30-Sep-201		09:55
Final Calibrati			@1000Hz	Correction	0.2dB		Date	30-Sep-201	4 Time	16:25
Measuremen	it Location(s)								1	
Description				lential proper	r				Height above grou	
GPS Coordina		NH77045 B	NG01207		Bearing to s	ource	North West	:	Distance to source	
Vertical Refl. 9 Sketch/ Photo		None							Distance to surface	e - m
Y			5					-		
Weather		-								
Measured	0-3m/s	Equipment l	Details:	Silva Windw	atch					
n Estimated (Beaufort Sc	cale)	Select: [] [] [3] [3] [3] [3] [3] [3] [3] [3] [Force 0 1 2 3	1.5-3.3	Description Calm Light air Light breeze Gentle breeze			ie rises verti on visible in n exposed si	-	12
		0	4	5.5-8.0	Moderate b	eeze	Dust and lo	ose paper m	used. Small branche	es begin to move.
			5	8.0-10.8	Fresh breez				size move. Small t	-
Wind Directio	10.	Westerly		Conditions:		[]Fog				ther Cloud
Temperature Measured No	oise Levels	12-14°C				[] Rain / 9	aow	[X] Sun		
Location	Date	Time & I	Duration	LAng	LAMas	LAMin	L _{3.90}	LAD	Notes	
Three Bridges General Obse	30/09/2014	10:00 - 3	bours	53.2	76.3	41.7	47.5	57.3	s	ee Below
				ge of trains or		fain Line an	d overflight	of aircraft in		ocal traffic on the B9152 with residential activity at



Project		A9 Baseline	e Noise Asse	superit						Date	30-Sep-2014
Measurement	t Location		mon Cottage							By	15
ource(s) Des	scription	Road traffi	-								
Equipment											
ound Level I	Meter	Castle Pro-	DX Vocis M	(GA131			Serial No.	0062925		Cal. Date	9-May-2014
ficrophone		Castle 1/2"					Serial No.	1026		Cal. Date	9-May-2014
reamplifier		Castle MKI	DXP				Serial No.	5035		Cal. Date	9-May-2014
ield Calibrat	tor	Castle GA6	607				Serial No.	035748		Cal. Date	9-May-2014
nitial Calibra	tion Level	94.0dB	@1000Hz	Correction	0.2dB		Date	30-Sep-201	4	Time	09:55
inal Calibrat		94.0dB	@1000Hz	Correction	0.2dB		Date	30-Sep-201	4	Time	16:25
le asuremer	nt Location(s))							_		
escription		In open an	ea between n	esidential proj	perty and A9)			Height abo	ve ground	1.25 m
PS Coordin	antes	NH76635 I	BNG01227		Bearing to	source	East		Distance to	source	55.00 m
Vertical Refl.	Surface(s)	None							Distance to	surface	- <u>m</u>
								A PAR			
								at the set of the set			
Veather										- A	
Measured	0-3 m/s	Equipment		Silva Windw						- A	
Measured Estimated		Select:	Force	m/s	Descriptio	a	Conditions			A A	
Measured		Select:	Force 0	m/s <0.3	Descriptio Calm	а а	Calm. Smol	ie rises verti		A A	
Measured Estimated		Select: [] []	Force 0 1	m/s <0.3 0.3-1.5	Descriptio Calm Light air		Calm. Smol Wind motic	ie rises verti on visible in	smoke.	A A	
Measured Estimated		Select: [] [] [X]	Force 0 1 2	m/s <0.3 0.3-1.5 1.5-3.3	Descriptio Calm Light air Light breez		Calm. Smol Wind motic Wind felt o	ie rises verti an visible in n exposed si	smoke. kin. Leaves r		
Measured Estimated		Select: [] [] [X]	Force 0 1 2 3	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5	Descriptio Calm Light air Light breez Gentle bree	e :2e	Calm. Smol Wind motio Wind felt o Leaves and	ie rises verti on visible in n exposed si smaller twig	smoke. kin. Leaves r rs in constant	t motion.	
Measured Estimated		Select: [] [3] [3] []	Force 0 1 2 3 4	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0	Descriptio Calm Light air Light breez Gentle bree Moderate b	e :ze ueeze	Calm. Smol Wind motio Wind felt o Leaves and Dust and lo	ie rises verti on visible in n exposed si smaller twig tose paper n	smoke. kin. Leaves r rs in constant used. Small k	t motion. branches beg	-
*	icale)	Select: [] [] [X] [] [] []	Force 0 1 2 3 4	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8	Descriptio Calm Light air Light breez Gentle bree	e ize izeze ize	Calm. Smol Wind motio Wind felt o Leaves and Dust and lo	ie rises verti on visible in n exposed s smaller twig ose paper n f a moderate	smoke. kin. Leaves r rs in constant used. Small k	t motion. branches beg Small trees b	egin to sway.
Measured Estimated (Bemfort S	icale) on	Select: [] [] [X] [] [] [] Westerly	Force 0 1 2 3 4	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0	Descriptio Calm Light air Light breez Gentle bree Moderate b	e ize iteeze []Fog	Calm. Smol Wind motio Wind felt o Leaves and Dust and lo Branches of	ie rises verti on visible in n exposed si smaller twig ose paper n f a moderate []] Frost	smoke. kin. Leaves r rs in constant used. Small k	t motion. branches beg	egin to sway.
Measured Estimated (Bemfort S Vind Directio	icale) on	Select: [] [] [X] [] [] []	Force 0 1 2 3 4	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8	Descriptio Calm Light air Light breez Gentle bree Moderate b	e ize izeze ize	Calm. Smol Wind motio Wind felt o Leaves and Dust and lo Branches of	ie rises verti on visible in n exposed s smaller twig ose paper n f a moderate	smoke. kin. Leaves r rs in constant used. Small k	t motion. branches beg Small trees b	egin to sway.
Measured Estimated (Beaufort S Vind Direction emperature feasured N	icale) ion	Select: [] [] [X] [] [] Westerly 12-14°C	Force 0 1 2 3 4	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8 Conditions:	Descriptio Calm Light air Light breez Gentle bree Moderate b Fresh breez	e zze reeze [] Fog [] Rain / S	Calm. Smol Wind motio Wind felt o Leaves and Dust and lo Branches of inow	ie rises verti on visible in n exposed si smaller twig ose paper n f a moderate []] Frost	smoke. kin. Leaves r rs in constant used. Small k	t motion. branches beg Small trees b	egin to sway.
Measured Estimated (Beaufort S Vind Director	on Joise Levels	Select: [] [] [] [] [] [] [] [] [] [] [] [] []	Force 0 1 2 3 4 5	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8	Descriptio Calm Light air Light breez Gentle bree Moderate b	e ize iteeze []Fog	Calm. Smol Wind motio Wind felt o Leaves and Dust and lo Branches of	ie rises verti an visible in n exposed si smaller twig ose paper n f a moderate [] Frost [X] Sun	smoke. kin. Leaves r rs in constant sised. Small k r size move. (t motion. branches beg Small trees b	egin to sway. Cloud



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Project	A9 Baselii	ne Noise Asse	ssment				1	Date	23-Sep-2014
Measurement Location	MP16 - C	roila Road	3	в ₇	IS				
Source(s) Description	Road traff	ad traffic on local road and A9 in distance, movements on the Highland Main Line and overflight of military aircraft							
Equipment									
Sound Level Meter	Castle Pro	-DX Voeis M	(GA131		Serial No.	0062925		Cal. Date	9-May-2014
Microphone	Castle ½"				Serial No.	1026		Cal. Date	9-May-2014
Preamplifier	Castle MB	DXP			Serial No.	5035	(Cal. Date	9-May-2014
Field Calibrator	Castle GA	4607			Serial No.	035748		Cal. Date	9-May-2014
Initial Calibration Level	94.0dB	@1000Hz	Correction	0.2dB	Date	23-Sep-2014		Time	09:55
Final Calibration Level	94.0dB	@1000Hz	Correction	0.2dB	Date	23-Sep-2014		Time	16:25
Measurement Location	(s)								
Description	In parkiar	id area at the (end of Croila	Road overlooking A9			Height above	e ground	1.25 m
GPS Coordinates	NH76321	BNG01156		Bearing to source	East	Distance		source	330.00 m
Vertical Refl. Surface(s)	None	None Distance to surface - m						- m	
Sketch/ Photographs									





Weather										
□ Measured	0 - 2 m/s	Equipmer	it Details	: Silva Windy	watch					
Estimated		Select:	Force	m/s	Description		Conditions	;		
(Beaufort S	cale)	[] 0	<0.3	Calm		Calm. Smol	æ rises verti	ically.	
		[] 1	0.3-1.5	0.3-1.5 Light air		Wind motion visible in smoke.			
		p	g 2	1.5-3.3	Light breeze		Wind felt o	n exposed s	ikin. Leaves rustle.	
	[] 3		3.3-5.5	Gentle bre	ze	Leaves and	smaller twig	gs in constant motion.		
	[] 4		5.5-8.0	Moderate b	reeze	Dust and loose paper raised. Small branches begin to move.				
	[] 5 8.0-10.		8.0-10.8	Fresh brees	Fresh breeze Branches of a moderate size mo			e size move. Small trees begin to sway.		
Wind Directi	on	Westerly		Conditions		[]Fog		[] Frost	[X] Other: Cloud	
Temperature		12-13°C			[] Rain /		Snow	[]Sun	Occasional light drizzle	
Measured N	loise Levels			•						
Location	Date	Time &	k Durati	on L _{Aeq}	LAMax	LAMin	L _{3.90}	L _{A30}	Notes	
Croila Road	23/09/2014	13:20 - 3 hours		45.9	80.9	33.6	35.7	42.1	See Below	
General Observations										
		-		•		-	-		Sources noted included local road traffic in	
vicinity and distance traffic on the A9, together with the overflight of aircraft together with local residents using the open area used for the measurement to										
					exercis	e their dogs.				



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Project		A9 Baseline	e Noise Asse	ssment						Date	30-Sep-2014
Measurement Lo	ocation	MP17 - An								By	IS
Source(s) Descri	iption			local traffic	(B9152) thro	ugh Lyncha	t, together w	ith noise fro	m domestic		
Equipment											
Sound Level Me	eter	01dB Blue	Solo				Serial No.	61046		Cal. Date	24-Jan-2014
Microphone		01dB MCE	212				Serial No.	142693		Cal. Date	24-Jan-2014
Preamplifier		01dB Pre 21 5 Sezial No. 16016								Cal. Date	24-Jan-2014
Field Calibrator		Castle GA6	607				Serial No.	035748		Cal. Date	9-May-2014
Initial Calibratio	on Level	94.0dB	@1000Hz	Correction 0.2dB Date			Date	30-Sep-2014		Time	09:45
Final Calibration	n Level	94.0dB	@1000Hz	Correction	0.2dB		Date	1-Oct-2014		Time	09:55
Measurement I	Location(s)										
Description		Bare develo	are development plot adjacent to 2 new properties close to A9 Height above ground 1.25 m								
GP5 Coordinate	8	NH82237, BNG04734 Bearing to source					North		Distance to	source	90.00 m
Vertical Refl. Su	urface(s)	None							Distance to	surface	- m
Sketch/ Photogr	raphs										
Weather											
- Measured		Equipment	Details:	Silva Windw	ateh						
D Estimated		Select:	Force	m/s	Descriptio		Conditions				
(Beaufort Scale	e)	[]		<0.3	Calm	-		, te rises verti	cally.		
	~			0.3-1.5				n visible in			
Based on obser	ervation of				Light breez			a exposed sk		ustle.	
local weather				3.3-5.5	-			smaller twig			
		Ü			Moderate b			-		oranches begi	n to move.
		ü		8.0-10.8	Fresh breez	e				Small trees be	
Wind Direction		Westerly		Conditions:		[]Fog		[]Frost		[X] Other:	
Temperature		6-16°C		1		[] Rain / S	now	[] Sun			
Measured Nois	se Levels										
Location D:	ate	Time &	Duration	LAcq	LAMax	LAMin	L _{A90}	L.410	Notes		
Ard Dalle, Jumebat	0/09/2014 -		0600 - 0000	52.0	76.9	30.2	45.2	54.2		See Bel	0177
Kingussie	1/10/2014	Night-time	0000 - 0600	49.7	63.9	27.4	38.0	50.2			
General Observ	vations										
Location elo	ose to A9 at	new residen		nent area on ential activity					ttes at this lo	eation, toget	her with limited



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		1M									
Project		A9 Baseline	Noise Asse	ssment					1	Date	1-Oct-2014
Measurement	Location	MP18 - Mai	ns of Balavi	1					1	Bγ	15
Source(s) Des	cription	n Road Traffic on A9 together with noise from Highland Main Line in distance and B9152									
Equipment											
Sound Level 1	Meter	01dB Blue S	olo				Serial No.	61046		Cal. Date	24-Jan-2014
Microphone		01dB MCE2		Serial No. 142693						Cal. Date	24-Jan-2014
Preamplifier		01dB Pre 21					Serial No.	16016		Cal. Date	24-Jan-2014
Field Calibrat	or	Castle GA60					Serial No.	035748		Cal. Date	9-May-2014
Initial Calibra				Correction	0.2dB		Date	1-Oct-2014		Time	10:05
Final Calibrat			-					2-Oct-2014		Time	10:35
Measuremer	t Location(s)		0								
Description											1.25 m
GPS Coordin	ates	NH79025, E			Bearing to		South		Distance to		50.00 m
Vertical Refl.		None							Distance to :		- m
Sketch/ Phot	5.7										_
Weather											
n Measured		Equipment	Details:	Silva Windw	atch						
o Estimated		Select:	Force	m/s	Descriptio	n	Conditions				
(Beaufort S	cale)		0	<0.3	Calm		Calm. Smok	e rises verti	eally.		
		[X]	1	0.3-1.5	Light air		Wind motio	n visible in	smoke.		
	servation of	[]	2		Light breez		Wind felt or	a exposed sl	tin. Leaves ru	stle.	
local weat	her reports		3		Gentle bree			-	s in constant		
		[]	4		Moderate b				used. Small br	-	
		[]	5	1	Fresh breez		Branches of	f a moderate	size move. Si		
Wind Directio	n	Westerly		Conditions:		[]Fog		[] Frost		[X] Other:	Cloud
Temperature Measured N		10-14°C				[]Rain / 5	10W	[]Sun			
									L		
Location	Date	Time & I	Duration	LArq	LAMax	LAMin	L _{A90}	LAD	Notes		
Mains of Balavil,	02/10/2014 -	Daytime 00	500 - 0000	61.6	83.5	29.8	45.3	65.8		See Bei	low
Kingussie	03/10/2014	Night-time (0000 - 0600	56.7	73.3	29.4	33.4	60.0			
General Obs	ervations										
Location close to A9 at old but occupied residential location in the estate steading for the Balavil Estate. This location is predominantly affected by road traffic noise on the A9, together with some contribution from the Highland Main Line and the B9152 Kingussie to Kineraig road.											



<u>CN2</u>	M		KHU	RSI							
Project		A9 Baseline l	Noise Asse	ssment						Date	1-Oct-2014
Measurement Lo	eation	MP19 - Bala								By	IS
Source(s) Descri			load traffic on A9								
Equipment											
Sound Level Met	ter	Castle Pro-D	X Vocis M	GA131			Serial No.	0062925		Cal. Date	9-May-2014
Microphone		Castle ½"					Serial No.	1026		Cal. Date	9-May-2014
Preamplifier		Castle MKD	XP				Serial No.	5035		Cal. Date	9-May-2014
Field Calibrator		Castle GA60					Serial No.	035748		Cal. Date	9-May-2014
Initial Calibration	n Level		@1000Hz	Correction	0.2dB		Date	1-Oct-2014	ł	Time	11:00
Final Calibration	Level	94.0dB (@1000Hz	Correction	0.2dB		Date	1-Oct-2014	ł	Time	14:15
Measurement I	Location(s)		-								
Description		In garden on	large estat	e house with	direct line of	sight to A9			Height abo	ve ground	1.25 m
GPS Coordinate		NH79087 B			Bearing to s		South		Distance to		260.00 m
Vertical Refl. Sur	rface(s)	None							Distance to	surface	- m
Sketch/ Photogr	aphs										
Weather				A				1			
Measured	0-3m/s	Equipment I		Silva Windw		_	0				
Estimated			Force	m/s	Description	n	Conditions				
(Beaufort Scale)	[] []	0	<0.3	Calm Light air			æ rises verti an visible in			
		23	2		Light hreeze				smone. sin. Leaves r		
		ра []	3		Gentle bree			-	s in constant		
		1	4		Moderate b			-		mouon nunches begi	n to more
		1	5		Fresh breez					Small trees be	
Wind Direction		Westerly		Conditions:		[]Fog		[] Frost		[X] Other	
Temperature		12-14°C				[]Rain / S	now	[] Sun		Oceasional 1	
Measured Nois	e Levels					() 10m / 3		1 2.00		Second 1	-Contention
Location	Date	Time & I	Duration	L	Law	Lun	Lum	L _{A10}	Notes		
Balavil House 01	1/10/2014	11:00 - 3		L _{Aeq} 54.7	L _{А.Мах} 70.8	L _{XMin} 37.4	46.5	59.0		See Bel	ow
General Observ	rations										
Isolated larg				19 and with a 15 sheltered by							s (although the



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Project	A9 Baseli	ne Noise Asse	ssment				Date	29-Sep-2014
Measurement Location	MP20 - D	Daunachton Lo	odge		By	IS		
Source(s) Description	Road traf	fie on A9, mo	vements on t	he Highland Main Lin	e and activity a	round estate		
Equipment								
Sound Level Meter	Castle Pro	o-DX Voeis M	I GA131		Serial No.	0062925	Cal. Date	9-May-2014
Microphone	Castle ½				Serial No.	1026	Cal. Date	9-May-2014
Preamplifier	Castle MI	(DXP			Serial No.	5035	Cal. Date	9-May-2014
Field Calibrator	Castle G/	Castle GA607				035748	Cal. Date	9-May-2014
Initial Calibration Level	94.0dB	@1000Hz	Correction	0.2dB	Date	29-Sep-201	4 Time	09:55
Final Calibration Level	94.0dB	@1000Hz	Correction	0.2dB	Date	29-Sep-201	4 Time	16:25
Measurement Location(s)							
Description	On large	garden betwee	n Dunachtor	1 Lodge house and A9			Height above ground	1.25 m
GPS Coordinates	NH82237	7 BNG04734		Bearing to source	South East		Distance to source	110.00 m
Vertical Refl. Surface(s)	None					Dista		- m
Sketch/ Photographs								







Weather										
□ Measured	0-3m/s	Equipment	Details:	Silva Windu	nteh					
Estimated		Select:	Force	m/s	Descriptio	n	Conditions			
(Beaufort S	cale)	1	[] 0		Calm		Calm. Smol	ke rises verti	ieall y .	
		1	1	0.3-1.5	0.3-1.5 Light air		Wind motio	on visible in	smoke.	
	[X] 2		1.5-3.3	Light breeze		Wind felt on exposed skin. Leaves rustle.				
	[] 3		3.3-5.5	Gentle bree	ze	Leaves and smaller twigs in constant motion.				
		1	4	5.5-8.0 Moderate breeze I		Dust and loose paper raised. Small branches begin to move.				
		1	5	8.0-10.8 Fresh breeze		Branches of a moderate size move. Small trees begin to sway.				
Wind Directi	on	Westerly		Conditions:		[]Fog		[] Frost	[] Other:	
Temperature		15-18°C			[] Rain / 9			Snow [X] Sun		
Measured N	loise Levels			•						
Location	Date	Time &	Duration	LAcq	LAMax	LAMin	L _{A90}	L ₃₁₀	Notes	
Dunachton Lodge	29/09/2014	13:15 - 3 hours		55.1	67.2	37.1	45.5	59.4	See Below	
General Obs	ervations	•		•	•	•	•	•		
Isolated lo	cation elevated	from the A	9 and with :	a clear line of	sight to the r	road. The m	ajor noise so	urce is the A	A9 throughout the measurement, with some	
activities aro	und the measu	rement locat							on the gravel drive. In addition noise could be	
			h	eard from the	e Highland M	fain Line an	d overflying	aircraft.		



ch2mi	FAIRHURST
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	Um 📕										
Project	A9 Bas	eline N	loise Asse	ssment						Date	29-Sep-2014
Measurement Location MP21 - Silverwood									By	15	
Source(s) Description	Road T	raffie o	on local re	ad (B9152) a	nd A9 which	is more dis	taut				
Equipment											
Sound Level Meter	01dB B	IB Bine Solo					Serial No.	61046		Cal. Date	24-Jan-2014
Microphone 01dB MCE212							Serial No.	142693		Cal. Date	24-Jan-2014
Preamplifier				Serial No.	16016		Cal. Date	24-Jan-2014			
Field Calibrator	Castle (GA607					Serial No.	035748		Cal. Date	9-May-2014
				Correction	0.2dB		Date	29-Sep-2014		Time	08:55
Final Calibration Level Measurement Location	94.0dB	@	1000Hz	Correction	0.2dB		Date	30-Sep-2014		Time	09:35
Description	<u> </u>	Residential garden overlooking B9152					1	-		re ground	1.25 m
GPS Coordinates	<u> </u>	NH82824, BNG05536				Bearing to source		North West		source	155.00 m
Vertical Refl. Surface(s)	None							Distance to		surface	- m
Sketch/ Photographs											
Weather E Measured	Equipa	nent D	eraile	Silva Windw	areh	F					
D Estimated (Beaufort Scale)	Select:		orce 0	m/s <0.3	Descriptio Calm	n	Conditions Calm. Smok				
(Destuort Scale)		[]	1								
Based on observation of	F			Light breeze		Wind motion visible in smoke. Wind felt on exposed skin. Leaves :			otle		
local weather reports	•		3		5 Gentle breeze			-	s in constant		
-			4		0 Moderate breeze			-	used. Small branches begi		n to more
				Fresh breeze		Branches of a moderate		-			
Wind Direction	Wester			Conditions:	11010 01001	[]Fog	Distanciales Of	[] Frost		IXI Other:	
Temperature	5-16°C	*				[]Rain / 2	now	[] Sun		and comer-	
Measured Noise Levels						() som / :		1			
Location Date	Time	e & Di	uration	LAng	LAMax	LAMin	L.4.90	L _{A30}	Notes		
Silverwood, Dunachton 29/09/2014	4 - Daytin			55.5	78.0	21.7	42.8	58.9		See Bel	017
Road, 30/09/201 Kineraig General Observations	Night-t	Night-time 0000 - 0600		49.1	68.2	21.1	25.3	53.1			
Location close to B915	2 and road	l traffie	dominate				from a slight ng topograpi		tant A9 which	h is slightly s	heltered from the



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roject		A9 Baseline N	oise Asse	essment						Date	23-Sep-2014
feasurement	Location	MP22 - Adjace		ent					By	IS	
auce(s) Des	eription	Road traffic on local road and A9 in distance, movements on the Highland Main Line and grounds maintenance work									e work
quipment	•	•					, in the second s				
and Level 1	Meter	Castle Fro-DX Vocis M GA131 Serial No. 0062925									9-May-2014
icrophone		Castle ½"				Serial No.	1026		Cal. Date	9-May-2014	
eamplifier		Castle MKDX	P				Serial No.	5035		Cal. Date	9-May-2014
ield Calibrato	or	Castle GA607					Serial No.	035748		Cal. Date	9-May-2014
iitial Calibrat		94.0dB @1000Hz Correction			0.2dB		Date	23-Sep-2014		Time	09:55
aal Calibration Level 94.0dB @1000Hz Correction				0.2dB		Date	23-Sep-2014		Time	16:25	
easuremen	nt Location(s)										-
escription		In parkland ap	ea adiaces	at to property	on Suidhe O	cescent Ki	neraia		Height abo	ve ground	1.25 m
PS Coordinates NH83251 BNG06015			nt to property on Suidhe Crescent, Ki Bearing to source			North West		Height above ground Distance to source		235.00 m	
ertical Refl. Surface(s) None								**	Distance to		- m
etch/ Photo	2.6	- 1988							and the second second		
			A CAR				1				
									A		
eather									A		
	0-2m/s	Equipment Do	etails:	Silva Windw	ratch				A		
eather Meanured Estimated	0-2m/s		etails:	Silva Windw m/s	atch		Condition:		A		
Measured Estimated								ke dise verti	cally.		
Measured Estimated		Select: Fo	orce	m/s ≪0.3	Description		Calm. Smol				
Measured Estimated		Select: Fo	orce 0	m/s ≪0.3 0.3-1.5	Description Calm		Calm. Smol Wind motic	ke rises verti on visible in		urie.	
Measured Estimated		Select: Fo [] []	orce 0 1	m/s ≪0.3 0.3-1.5 1.5-3.3	Description Calm Light air		Calm. Smol Wind motic Wind felt o	ke rises verti on visible in n exposed si	smoke.		
Measured		Select: Fo [] [] [X]	0 1 2	m/s ≪0.3 0.3-1.5 1.5-3.3 3.3-5.5	Description Calm Light air Light breeze	e ze	Calm. Smol Wind motio Wind felt o Leaves and	ke rises verti on visible in n exposed si smaller twig	smoke. kin Leaves r 5 in constant		in to move.
Measured Estimated		Select: Fo [] [] [X] []	0 1 2 3	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0	Description Calm Light air Light breeze Gentle breeze	e ze reeze	Calm. Smoo Wind motio Wind felt o Leaves and Dust and lo	ke rises verti on visible in n exposed si smaller twig sose paper ri	smoke. kin. Leaves r 5 in constant ised. Small b	t motion. oranches begi	
Measured Estimated	cale)	Select: Fo [] [] [2] [] []	0 1 2 3 4	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0	Description Calm Light air Light breeze Gentle breez Moderate br Fresh breez	e ze reeze	Calm. Smoo Wind motio Wind felt o Leaves and Dust and lo	ke rises verti on visible in n exposed si smaller twig sose paper ri	smoke. kin. Leaves r 5 in constant ised. Small b	t motion. oranches begi	in to move. egin to sway.
Measured Estimated Beaufort So ind Directio	cale)	Select: Fo [] [X] [] [] []	0 1 2 3 4	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8	Description Calm Light air Light breeze Gentle breez Moderate br Fresh breez	e ze zeeze e []Fog	Calm. Smol Wind motio Wind felt o Leaves and Dust and lo Branches o	ke rises verti on visible in n exposed si smaller twig rose paper m f a moderate [] Frost	smoke. kin. Leaves r 5 in constant ised. Small b	t motion. oranches begi Small trees b	
Measured Estimated Beaufort So ind Directio mperature	cale)	Select: Fo [] [] [X] [] [] Westedy	0 1 2 3 4	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8	Description Calm Light air Light breeze Gentle breez Moderate br Fresh breez	e ze reeze e	Calm. Smol Wind motio Wind felt o Leaves and Dust and lo Branches o	ke rises verti on visible in n exposed si smaller twig sose paper ri f a moderate	smoke. kin. Leaves r 5 in constant ised. Small b	t motion. oranches begi Small trees b	
Measured Estimated Beaufort Sc ind Direction imperature easured N	cale) DB	Select: Fo [] [] [X] [] [] Westedy	0 1 2 3 4 5	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8 Conditions:	Description Calm Light air Light breeze Gentle bree Moderate br Fresh breez	e ze e []Fog []Rin / S	Calm. Smol Wind motic Wind felt o Leaves and Dust and lo Branches of Snow	ke rises verti on visible in n exposed si smaller twig cose paper n f a moderate []] Frost [X] Sun	smoke. kin. Leaves r 5 in constant ised. Small b	t motion. oranches begi Small trees b	
Measured Estimated Beaufort So ind Directio	on oise Levels	Select: Fe [] [] [] [] [] [] Westerly 8-15°C	0 1 2 3 4 5	m/s <0.3 0.3-1.5 1.5-3.3 3.3-5.5 5.5-8.0 8.0-10.8	Description Calm Light air Light breeze Gentle breez Moderate br Fresh breez	e ze zeeze e []Fog	Calm. Smol Wind motio Wind felt o Leaves and Dust and lo Branches o	ke rises verti on visible in n exposed si smaller twig rose paper m f a moderate [] Frost	smoke. kin Leaves r 5 in constant ised. Small b size move. (t motion. oranches begi Small trees b	egin to sway.

g topography. Sources noted included local road traffic in the vicinity and distance traffic on the A9, together with the overflight of aircraft, passage of trains on the Highland Main Line and some grounds maintenance works on residential locations in the vicinity.



<u>ch</u>	2 <i>M</i>	· E4	AIRHU	JRST					Noise Measu	rement Record
Project		A9 Baselin	e Noise Asse	ssment					Date	24-Sep-2014
Measurement	Location	MP23 - The Old Mante								15
Source(s) Des				I local traffic	(B9152), tog	ether with n	oise from do	mestic activ	By	
Equipment									- /	
Sound Level I	Meter	01dB Blue	Solo				Serial No.	61046	Cal. Date	24-Jan-2014
Microphone		01dB MCE					Serial No.	142693	Cal Date	24-Jan-2014
Preamplifier		01dB Pre 2	15				Serial No.	16016	Cal Date	24-Jan-2014
Field Calibrat	20	Castle GA	607				Serial No.	035748	Cal Date	9-May-2014
Initial Calibra	tion Level	94.0dB	@1000Hz	Correction 0.2dB		Date	24-Sep-201	4 Time	09:55	
Final Calibrat	ion Level	94.0dB	@1000Hz	Correction	Correction 0.2dB		Date	26-Sep-201	4 Time	10:30
Measuremen	nt Location(s))								
Description		Residential	garden over	looking A9 a	nd sheltered	from local r	oad (B9152)		Height above ground	1.25 m
GPS Coordinates NH82237, BNG04734					Bearing to :		South East		Distance to source	90.00 m
Vertical Refl.	Surface(s)	None							Distance to surface	- m
Sketch/ Phot	ographs									
1								1		
Weather										
🗆 Measured		Equipment	t Details:	Silva Windu	ateh					
o Estimated		Select:	Force	m/s	Descriptio	n	Conditions			
(Beaufort Scale)		L []] 0	<0.3	Calm		Calm. Smol	ke rises verti	cally.	
		[X]	1	1 0.3-1.5		Light air		on visible in	smoke.	
Based on observation of		[X]	2	1.5-3.3 Light breeze		e	Wind felt of	a exposed sl	in. Leaves rustle.	
local weather reports		[X]	[X] 3 3.3		3.3-5.5 Gentle breeze		Leaves and	smaller twig	s in constant motion.	
		[] 4		5.5-8.0 Moderat		oderate breeze		ose paper ri	ised. Small branches beg	in to move.
		0	5	8.0-10.8	Fresh breez	e	Branches of	f a moderate	size move. Small trees b	egin to sway.
Wind Directio	a	Westerly		Conditions:		[]Fog		[] Frost	[X] Other:	Cloud
Temperature		10-16°C				[] Rain / 9	now	[]Sun		
Measured N	oise Levels									
Location	Date	Time &	Duration	LAcq	LAMax	L _{AMin}	L _{A90}	LAB	Notes	
The Old Manse,	24/09/2014 -	Daytime (0600 - 0000	55.3	85.4	26.2	47.2	57.4	See Be	tlow
Kineraig	26/09/2014	Night-time 0000 - 0600		52.5	69.5	27.7	40.3	54.6		
General Obs	ervations									



