Highwood Land LLP and Galliford Try Partnerships

Eastleigh Strategic Growth Option

Noise Assessment

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1	23rd November 2017	First Issue
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3	25th May 2018	Third Issue – Updated Traffic Flows
4	6th June 2018	Fourth Issue – Minor Amendments
5	7th June 2018	Fifth Issue – Minor Amendments

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1.0 Introduction

This report presents and considers the noise impacts of a potential access road linking land north of Fair Oak and Bishopstoke in Eastleigh, starting to the south-east of Allbrook, passing through land at Crowdhill before joining the B3037 (Mortimers Lane) to the east of Fair Oak.

The noise levels across the site resulting from road traffic on the local road network have been predicted at existing residential receptors using CADNA noise modelling software, which incorporates ISO 9613, CRTN methodologies and calculations.

This updated version of the report considers noise effects on the nearby South Downs National Park and the assessment includes updated traffic flows on roads between Eastleigh and Bishop's Waltham

A list of acoustic terminology and abbreviations used in this report is provided in Appendix A and a set of location plans and noise contour plots relevant to the assessment are presented in Appendix B.

1.1 Legislative Context

Policy guidance with respect to noise is found in National Planning Policy Framework (NPPF). With regard to noise and planning, NPPF contains the following 4 short statements (section 123):

- Avoid noise from giving rise to significant adverse impacts on health and quality of life as a result of new development;
- Mitigate and reduce to a minimum other adverse impacts on health and quality of life arising from noise from new development, including through the use of conditions;
- Recognise that development will often create some noise and existing businesses wanting to develop in continuance of their business should not have unreasonable restrictions put on them because of changes in nearby land uses since they were established; and
- Identify and protect areas of tranquillity which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason.

The National Planning Practice Guidance (NPPG) web-based resource was launched by the Department for Communities and Local Government (DCLG) on 6 March 2014 to support the NPPF and make it more accessible. The overall aim of the guidance, tying in with the principals of the NPPF and the Explanatory Note of the Noise Policy Statement for England (NPSE), is to *identify whether the overall effect of noise*

exposure is, or would be, above or below the significant observed adverse effect level and the lowest observed adverse effect level for the given situation.

A summary of the effects of noise exposure associated with both noise generating developments and noise sensitive developments is presented within the NPPG and repeated as follows:

Table 1.1 NPPG Noise Exposure Hierarchy

Perception	Examples of Outcomes	Increasing Effect Level	Action
Not noticeable	No Effect	No Observed Effect	No Specific Measures Required
Noticeable and not intrusive	Noise can be heard, but does not cause any change in behaviour or attitude. Can slightly affect the acoustic character of the area but not such that there is a perceived change in the quality of life.	No Observed Adverse Effect	No Specific Measures Required
Lowest Observed Adverse Effect Level (LOAEL)			
Noticeable and intrusive	Noise can be heard and causes small changes in behaviour and/or attitude, e.g. turning up volume of television; speaking more loudly; closing windows for some of the time because of the noise. Potential for non-awakening sleep disturbance. Affects the acoustic character of the area such that there is a perceived change in the quality of life.	Observed Adverse Effect	Mitigate and reduce to a minimum
Significant Observed Adverse Effect Level (SOAEL)			
Noticeable and disruptive	The noise causes a material change in behaviour and/or attitude, e.g. having to keep windows closed most of the time, avoiding certain activities during periods of intrusion. Potential for sleep disturbance resulting in difficulty in getting to sleep, premature awakening and difficulty in getting back to sleep. Quality of life diminished due to change in acoustic character of the area.	Significant Observed Adverse Effect	Avoid
Noticeable and very disruptive	Extensive and regular changes in behaviour and/or an inability to mitigate effect of noise leading to psychological stress or physiological effects, e.g. regular sleep deprivation/awakening; loss of appetite, significant, medically definable harm, e.g. auditory and non-auditory	Unacceptable Observed Adverse Effect	Prevent

The NPPF, NSPE and NPPG do not, however, present absolute noise level criteria which define SOAEL, LOAEL and NOEL which is applicable to all sources of noise in all situations. Therefore, within the context of the Proposed Development, national planning policy and appropriate guidance documents, Section 2.0 presents the noise level criteria used as a basis of this assessment.

The NPPG also states that *neither the NPSE nor the NPPF (which reflects the Noise Policy Statement) expects noise to be considered in isolation, separately from the economic, social and other environmental dimensions of the proposed development.*

1.2 Acoustic Consultants' Qualifications, Professional Memberships

The project Acoustic Consultant is Ben Bryan. The report has been checked by Helen Makewell and verified by Nigel Mann. Relevant qualifications, membership and experience are summarised below.

Table 1.2 Acoustic Consultants' Experience

Name	Education	Institute of Acoustics Post Graduate Diploma in Acoustic and Noise Control (Pass Date)	Experience in Undertaking Noise Assessments (Start date of working in noise & acoustics)	Attained Associate Membership of the Institute of Acoustics (date)	Attained Membership of the Institute of Acoustics (date)
Helen Makewell	Bsc (2004)	Dec 2010	Nov 2008	Mar 2011	Mar 2014
Ben Bryan	MSc (2016)	-	January 2017	-	-
Nigel Mann	BSc, (1997) MSc (1999)	Nov 2001	Nov 1998	Nov 2001	Jul 2005

2.0 Assessment Criteria

2.1 Road Traffic Noise Assessment Criteria

In order to enable the assessment of the potential link road in terms of LOAEL and SOAEL, Table 2.1 presents equivalent noise levels and associated actions with the target noise level criteria identified. The noise level criteria detailed below have been derived from standards and design guidance:

Table 3.2 of HD213/11 published in November 2011 (Design Manual for Roads and Bridges)

Table 2.1 Noise Level Criteria and Actions

Effect Level	Noise Level Criteria	Action / Justification
No Observed Adverse Effect	Short-term Change in noise is: 0.0 – 0.9 dB $L_{A10,18h}$ Long-term Change in noise is: 0.0 – 2.9 dB $L_{A10,18h}$	No Action Required
Lowest Observed Adverse Effect Level (LOAEL)	Short-term Change in noise is: 1.0 – 2.9 dB $L_{A10,18h}$ Long-term Change in noise is: 3.0 – 4.9 dB $L_{A10,18h}$	Mitigate to achieve: Short-term Change in noise is: <1.0 dB $L_{A10,18h}$ Long-term Change in noise is: <3.0 dB $L_{A10,18h}$
Significant Observed Adverse Effect Level (SOAEL)	Short-term Change in noise is: 3.0 – 4.9 dB $L_{A10,18h}$ Long-term Change in noise is: 5.0 – 9.9 dB $L_{A10,18h}$	Mitigate and reduce as far as practicable
Unacceptable Observed Adverse Effect Level (UOAEL)	Short-term Depending on context, change in noise is: >5.0 dB $L_{A10,18h}$ Long-term Change in noise is: >10.0 dB $L_{A10,18h}$	Mitigate and reduce as far as practicable

2.2 Noise Insulation Regulations

The 1975 Noise Insulation Regulations and subsequent amendment regulations provide criteria for assessing the eligibility for noise mitigation or properties based on variations in traffic noise due to a new or improved road scheme. Noise level criteria are given within the Regulations which, if satisfied, indicate whether properties in the vicinity may be entitled to the installation of additional noise insulation or to a grant to cover the cost of the noise insulation.

The entitlement conditions of the Noise Insulation Regulations are triggered when:

i. 'the $L_{A10\ (18\ hour)}$ predicted figure is greater by at least 1 dB than the prevailing noise level'

ii. 'the $L_{A10\ (18\ hour)}$ predicted figure is not less than the specified level ($L_{A10\ (18\ hour)}$ = 68 dB)'

iii. 'the noise caused, or expected to be caused, by traffic using or expected to use the new highway makes an effective contribution to the $L_{A10\ (18\ hour)}$ predicted figure of at least 1 dB'

Assessment of the closest receptors to the proposed road have been assessed, the results of which can be viewed in Section 4.1 of this report.

2.3 South Downs National Park

In assessing the specific impacts of any options against the Purposes and Duty of the National Park the South Downs National Park Authority request the framework of the Seven Special Qualities of the South Downs be used. Table 2.2 below lists these qualities.

Table 2.2 Seven Qualities of the South Downs National Park

Special Quality	Impacts to be assessed could include:
Diverse, inspirational landscapes and breath-taking views	Effects on landscape and long, uninterrupted views
Tranquil and unspoilt places	Noise, lighting, traffic, effect on dark night skies
A rich variety of wildlife and habitants including rare and internationally important species	Effects on internationally, nationally and locally designated habitats and species
An environment shaped by centuries of farming and embracing new enterprise	Effects on the farming economy, diversification and the ability of new enterprises to set up and develop sustainable businesses
Great opportunities for recreational activities and learning experiences.	Effects on rights of way and other access routes. Effect of increased traffic and changes in air quality. Opportunities to improve (in an appropriate manner) the accessibility of the national park to existing and new residents through non-motorised means, including ensuring that new and existing roads do not cause severance.
Well-conserved historical activities and learning experiences	Positive and negative effects on historic and protected monuments, villages and communities
Distinctive towns and villages, and communities with real pride in their area	Positive and negative effects of any direct or indirect changes in traffic volumes and speeds, and access to local services. Severance is frequently an issue caused by traffic and traffic speeds for settlements within and around the SDNP

3.0 Assessment Methodology

3.1 Noise Modelling Methodology

Three-dimensional noise modelling has been carried out for the potential link road, based on alignments provided by Paul Basham Associates and SYSTRA. Modelling has been undertaken to demonstrate the sound pressure levels, expected both horizontally and vertically to impact existing noise sensitive properties as a result of the proposed road.

CADNA noise modelling software has been used. This model is based on the Department of Transport Calculation of Road Traffic Noise (CRTN) and ISO 9613 noise propagation methodology and allows for detailed prediction of noise levels to be undertaken for large numbers of receptor points and different noise emission scenarios both horizontally and vertically. The modelling software calculates noise levels based on the emission parameters and spatial settings that are entered. Input data, assumptions and model settings as given in the table below have been used.

Table 3.1 Modelling Parameters Sources and Assumptions

Parameter	Source	Details
Horizontal distances – around site	Ordnance Survey	Ordnance Survey
Ground levels – around site	Ordnance Survey	Ordnance Survey
Ground levels – other areas	Site Observations and Ordnance Survey	OS 1:25,000 contours and OS 1:10,000 spot heights.
Building heights – around site	WYG Observations	8 m height for two storey residential properties, and 4 m for Bungalows
Receptor positions	WYG	1 m from façade, height of 1.5 m for ground floor, 4 m for first floor properties with ground floor or bungalow dormer windows. 7 m for dormer windows on two storey properties. 1.5 m height for model grid and monitoring locations for validation.
Reflections	WYG	First order reflections have been applied based on mirror image sources
Absorbent Ground	CADNA	Frequency dependant ground absorption has been applied based on values specified in VDI 2714/16 clause 6.3.
Façade Correction	CADNA	Façade corrections have been incorporated into the modelling

It is acknowledged that a number of these assumptions will affect the overall noise levels presented in this report. However, it should be noted that certain assumptions made, as identified above, are worst-case.

3.1.1 Road Traffic Data

All roads expected to make a significant contribution have been included within this assessment. Traffic flows and vehicle speeds have been based on traffic data provided by Paul Basham Associates and SYSTRA. There are a number of minor local roads for which estimates of road traffic volumes have been made to enable the assessment of effects; where future development scenario traffic flows for given links have not been provided, the equivalent baseline or committed development flows have been substituted. Baseline data has been provided for the year 2015 and the scenarios detailed below represent traffic levels in the year 2036 (Table B1 in Appendix B):

1. 2036 with committed development (Do Minimum 'DM')
2. 2036 A future scenario including all of the baseline assumptions plus the local plan growth and an 'intermediate' level of transport interventions (Do something 'DS2')
3. 2036 As per the Do Something scenario but with a 'high' level of transport interventions and mitigation measures (Do more 'DS3')

3.1.2 Limitations of Assessment

Although development-related changes to the wider road network have been predicted, an assumption of up to 20,000 vehicles per day using the potential access road has been included within the Do Something scenario and is considered to represent a worst-case scenario with respect to future traffic flows.

As the precise alignment of the potential access road has not been finalised, the effects of noise at existing properties, particularly where the access road is proposed to join the existing road network may vary significantly. Similarly, the screening effects of future buildings in areas served by the access road have not been included within the noise models and therefore the predicted noise levels are considered to represent a worst-case assessment.

A high-level assessment for properties' eligibility for noise insulation has been undertaken to indicatively show areas near the potential new link road where this will need to be considered, this incorporates areas where estimates of road traffic volumes have been estimated. A full assessment incorporating these areas with the respective development and non-development flows will need to be undertaken prior to making any offers of noise insulation

3.1.3 Sensitive Receptors

Noise levels have been assessed with respect to road traffic noise from both existing roads and the potential new link road; key receptor locations with respect to road traffic noise along principal routes likely

to be affected by the scheme have been selected and are described in Table 3.2 below; the locations of the receptors are shown illustratively on SK01 in Appendix A.

Table 3.2 Existing Residential Receptor Locations (Traffic Noise Assessment)

Ref.	Description	Closest Source	Approximate Distance To Source (m)	Height (m)
T01	84 Pitmore Road	New Road	216.0	4.0
T02	68a Pitmore Road	New Road	139.0	4.0
T03	8 Avery Fields	New Road	63.0	4.0
T04	39 Allbrook Hill	New Road	143.0	4.0
T05	89 Allbrook Hill	New Road	74.0	4.0
T06	58 Allbrook Hill	New Road	103.0	4.0
T07	10 Pitmore Road	New Road	25.0	4.0
T08	107 Allbrook Hill	New Road	10.0	4.0
T09	109 Allbrook Hill	New Road	22.0	4.0
T10	90 Allbrook Hill	New Road	43.0	4.0
T11	1 Pitmore Road	New Road	14.0	4.0
T12	Flat 8, Osborne Mews, Allbrook Hill	New Road	7.0	4.0
T13	7 Boyton Mead	New Road	30.0	4.0
T14	Dunoon, Highbridge Road	New Road	64.0	4.0
T15	Everglades, Wardle Road	New Road	10.0	4.0
T16	4 Highbridge Road	New Road	10.0	4.0
T17	Obleys Lodge, Highbridge	New Road	108.0	4.0
T18	Brambridge Lodge Farm	New Road	152.0	4.0
T19	Cobbitts, Wardle Road	New Road	139.0	4.0
T20	Hawthorn House, Lordswood	New Road	99.0	4.0
T21	Woodcroft Cottage, Bishopstoke Lane	New Road	132.0	4.0
T22	Oak Hill Cottage, Lordswood	New Road	83.0	4.0
T23	The Nook, Lordswood	New Road	107.0	4.0
T24	Fresh Fields, Bishopstoke Lane	New Road	121.0	4.0
T25	10 Ideal Park Homes, Bishopstoke Lane	New Road	245.0	4.0
T26	Oak Cottage, Stoke Common Farm	New Road	332.0	4.0
T27	20 Gilbert Avenue	New Road	480.0	4.0
T28	28 Sewall Drive	New Road	455.0	4.0
T29	12 Woodford Close	New Road	493.0	4.0
T30	Stoke Park Farm	New Road	12.0	4.0
T31	Crowdhill Farm	New Road	215.0	4.0
T32	Pear Tree Farm House	B3354	40.0	4.0
T33	6 Crowd Hill Terrace	B3354	17.0	4.0
T34	15 Delamere Gardens	New Road	124.0	4.0
T35	53 Delamere Gardens	New Road	102.0	4.0
T36	55 Delamere Gardens	B3354	68.0	4.0

Ref.	Description	Closest Source	Approximate Distance To Source (m)	Height (m)
T37	Clyffe Bungalow, Winchester Road	New Road	10.0	4.0
T38	Palmeroes, Winchester Road	New Road	10.0	4.0
T39	The Haven, Winchester Road	B3354	18.0	4.0
T40	Highview House, Winchester Road	B3354	28.0	4.0
T41	Jamesmead Farm	New Road	25.0	4.0
T42	Hall Lands Farm	New Road	429.0	4.0
T43	Lowhill Farm Cottages	New Road	451.0	4.0
T44	Little Dower House, Mortimers Lane	Mortimers Lane	40.0	4.0
T45	Mobile Home, Broadoak Stables	Mortimers Lane	23.0	4.0
T46	Stroudwood Dairy Farm	Mortimers Lane	45.0	4.0
T47	The Cottage, Stroudwood Lane	Mortimers Lane	91.0	4.0

4.0 Assessment of Effects

4.1 Road Traffic Noise Assessment

Assessment below compares the 'without development' and 'with development' traffic noise levels at representative receptors. The differences between the three scenarios are shown illustratively within Appendix A.

Table 4.1 Difference between the 2036 Do Minimum scheme and the 2036 Do Something and Do More schemes

Location	Traffic Noise Without Development 2036 ($L_{A10,18hr}$ dB(A)) (DM)	Traffic Noise with Committed Development Option Do Something 2036 ($L_{A10,18hr}$ dB(A))	Traffic Noise with Committed Development Option Do More 2036 ($L_{A10,18hr}$ dB(A))	Difference (Do Something – DM)	Difference (Do Something – DM)	Difference (Do Something – Do More)
T01	56.0	55.7	55.7	-0.3	-0.3	0.0
T02	55.4	56.6	56.5	1.2	1.1	0.1
T03	55.1	60.2	60.2	5.1	5.1	0.0
T04	64.1	59.0	57.2	-5.1	-6.9	1.8
T05	62.8	60.5	59.6	-2.3	-3.2	0.9
T06	68.8	61.7	59.4	-7.1	-9.4	2.3
T07	59.1	66.7	66.7	7.6	7.6	0.0
T08	61.4	70.0	70.0	8.6	8.6	0.0
T09	66.3	66.6	66.3	0.3	0.0	0.3
T10	68.9	64.6	63.6	-4.3	-5.3	1.0
T11	66.0	69.8	69.7	3.8	3.7	0.1
T12	71.1	72.3	72.3	1.2	1.2	0.0
T13	63.4	65.5	65.5	2.1	2.1	0.0
T14	67.2	59.2	59.2	-8.0	-8.0	0.0
T15	58.5	59.1	59.1	0.6	0.6	0.0
T16	58.1	63.3	63.3	5.2	5.2	0.0
T17	52.5	57.4	57.5	4.9	5.0	-0.1
T18	48.8	54.4	54.5	5.6	5.7	-0.1
T19	58.8	59.9	60.0	1.1	1.2	-0.1
T20	53.4	58.4	58.4	5.0	5.0	0.0
T21	56.4	58.5	61.1	2.1	4.7	-2.6
T22	51.9	58.3	58.4	6.4	6.5	-0.1
T23	51.9	57.8	58.1	5.9	6.2	-0.3
T24	55.9	58.8	61.1	2.9	5.2	-2.3
T25	49.9	53.6	55.0	3.7	5.1	-1.4
T26	47.6	51.0	52.2	3.4	4.6	-1.2
T27	51.9	53.2	53.2	1.3	1.3	0.0

Location	Traffic Noise Without Development 2036 ($L_{A10,18hr}$ dB(A)) (DM)	Traffic Noise with Committed Development Option Do Something 2036 ($L_{A10,18hr}$ dB(A))	Traffic Noise with Committed Development Option Do More 2036 ($L_{A10,18hr}$ dB(A))	Difference (Do Something – DM)	Difference (Do Something – DM)	Difference (Do Something – Do More)
T28	48.1	50.9	50.9	2.8	2.8	0.0
T29	45.7	48.9	49.0	3.2	3.3	-0.1
T30	44.2	69.1	69.1	24.9	24.9	0.0
T31	43.7	52.9	53.0	9.2	9.3	-0.1
T32	49.2	56.7	57.1	7.5	7.9	-0.4
T33	55.4	61.1	61.8	5.7	6.4	-0.7
T34	45.6	56.6	56.7	11.0	11.1	-0.1
T35	46.2	57.9	58.0	11.7	11.8	-0.1
T36	48.1	59.0	59.2	10.9	11.1	-0.2
T37	52.7	70.7	71.0	18.0	18.3	-0.3
T38	52.8	72.3	72.6	19.5	19.8	-0.3
T39	53.8	66.6	66.8	12.8	13.0	-0.2
T40	52.3	60.3	60.7	8.0	8.4	-0.4
T41	45.0	65.0	65.0	20.0	20.0	0.0
T42	52.3	53.2	53.3	0.9	1.0	-0.1
T43	40.8	48.5	48.6	7.7	7.8	-0.1
T44	47.4	51.3	52.1	3.9	4.7	-0.8
T45	58.1	60.1	61.4	2.0	3.3	-1.3
T46	56.5	58.5	59.3	2.0	2.8	-0.8
T47	58.5	59.3	59.5	0.8	1.0	-0.2

When the traffic noise level differences between the 2036 'Do minimum' and the 'Do something' and 'Do more' contributions are compared with the noise change criteria given in Table 2.1 of this report, the majority of representative receptors located adjacent to the existing road network would be expected to experience a change in noise level of less than 5 dB which when compared with the long-term assessment criteria in Table 2.1, is equivalent to the 'lowest observed adverse effect'.

A number of receptors close to existing roads show an increase between the 'Do minimum' scheme and the 'Do something' and 'Do more' scheme. This is particularly noticeable for receptors T34-T41 where the increase is greater than 10 dB due to their proximity to the new road. This level of change in noise level is not unexpected for a new road, especially in a rural area where there was not a road previously.

The change in noise level appears greater than predicted in the previous version of this report, which can be attributed to the difference in the traffic flows provided, between the 'Do minimum' scenario and the 'Do something' and 'Do more' scenarios.

Residential receptors that experience an increase in noise level of 5 dB or more will require mitigation to be installed so that the resulting noise increase falls within the No Observed Adverse Effect level, or as far as reasonably practicable with respect to Table 2.1. However, it should be noted that the assessment presented above does not account for the screening effects of potential development on parcels of land that would be served by the link road and should therefore be viewed as worst-case.

A limited number of key receptor locations may experience increases in noise levels of greater than 1 dB as a result of the scheme with an overall noise level in excess of 68 dB $L_{A10, 18hour}$ and will potentially have an entitlement to mitigation under the Noise Insulation Regulations.

4.2 Mitigation Options

As the assessment above has identified the potential for significant adverse effects at existing properties along the link road corridor, a number of mitigation measures are outlined below to reduce the adverse effects of noise associated with the strategic growth area:

- The creation of bunds and noise barriers at strategic locations to protect existing and future dwellings from road traffic noise.
- Consideration of the detailed route alignment, maximising buffer zones around existing residential and other sensitive spaces (such as schools and care homes).
- The use of low-noise road surfacing at strategic locations along the potential link road.
- The consideration of appropriate speed limits along the access road to reduce noise levels.
- The creation of cuttings to maximise the screening effects of existing landforms.
- The provision of grants for mitigation works at eligible properties, as determined within the Noise Insulation Regulations, subject to detailed assessment of the finalised route plans.

The following areas have been identified as key areas for consideration with respect to noise:

- The junction of the access road to the west of Allbrook, between the A335 Allbrook Way and Allbrook Hill.
- Isolated dwellings between Highbridge and Crowdhill.
- The creation of the access road at to the immediate west and east of Crowdhill.
- Isolated dwellings between Crowdhill and Mortimers Lane.
- Dwellings north of Fair Oak on the B3354

4.3 Noise effects on the South Downs National Park

With reference to Table 2.2 the proposed road will cause an increase in noise in a small section of the South Downs National Park. The predicted change in noise level is equivalent to less than 3 dB, which is considered to be generally imperceptible to the human ear and so is classified as 'No Observed Adverse Effect Level' in Table 2.1.

The proposed road will mainly decrease traffic numbers on the B3335 within the South Downs National Park as shown in SK05c in Appendix A.

4.4 Tranquillity Assessment

An assessment of the existing tranquillity level of the site has been undertaken, based on the mapping published by Campaign to Protect Rural England (CPRE). This uses a colour coded system and a 500m assessment grid for the whole of England, and a tranquillity rating of between 1 and 10 is assigned (1 being least tranquil and 10 being most).

The new road will pass through numerous footpaths, most of them close to where it will join the B3335, in the north. The road will decrease the tranquillity ratings of these footpaths without mitigation. However, the footpaths are already close to the B3335. Footpaths that intersect the proposed road further from existing roads will have a greater decrease in tranquillity.

With respect to the South Downs National Park the effect on the tranquillity will be small, shown in Sketches SK5c in Appendix A. However, there will be an increase in tranquillity where traffic flows decrease on the B3335 within the South Downs National Park.

The proposed road is 1200m from the national park and any direct noise effects from it are small, considering that there are other roads much closer to the South Downs National Park that have a much greater effect.

5.0 Conclusions

This high-level assessment considers the noise effects of a potential link road starting to the south-east of Allbrook, passing through land at Crowdhill before joining the B3037 (Mortimers Lane) to the east of Fair Oak, in Eastleigh, Hampshire.

The results of the assessment indicate that at the majority of existing dwellings located adjacent to the existing road network that changes in road traffic noise levels are expected to be limited and not expected to result in significant adverse effects. However, at dwellings located within approximately 450m of the potential access road and where traffic flows on other nearby road increase, the potential exists for significant adverse impacts with respect to noise.

Mitigation measures will be required to reduce the effects of noise at locations where the access road joins the existing road network, and other isolated dwellings along the access road corridor; with particular focus to be paid to the following key areas:

- The junction of the access road to the west of Allbrook, between the A335 Allbrook Way and Allbrook Hill.
- Isolated dwellings between Highbridge and Crowdhill.
- The creation of the access road at to the immediate west and east of Crowdhill.
- Isolated dwellings between Crowdhill and Mortimers Lane.
- Dwellings north of Fair Oak on the B3354

This high-level assessment has been prepared to consider the noise implications of the proposed strategic link road and to inform the emerging master plan for the Strategic Growth Option. This early assessment of the noise implications of the link road will ensure that the master plan includes sufficient built-in mitigation within the proposed development to enable the development to be delivered without giving rise to significant adverse impacts.

With respect to the South Downs National Park it is likely there will be an increase in noise in a small section near Lower Upham. The predicted increase in noise level is less than 3 dB which is generally considered to be imperceptible to the human ear and will not affect the tranquil and unspoilt nature of the national park. The proposed road is also likely to decrease traffic noise levels in the South Downs National Park between Twyford and Colden Common.

Appendices

Appendix A – Sketches

SK01 Study Area and Key Receptor Locations

SK01a Full Link Road Alignment – $L_{A10,18h}$ Do Minimum (DM) Noise Contours

SK01b Full Link Road Alignment – $L_{A10,18h}$ Do Something (DS) Noise Contours

SK01c Full Link Road Alignment – $L_{A10,18h}$ DM/DS Difference Noise Contours

SK02a Link Road Alignment, East of Allbrook – $L_{A10,18h}$ Do Minimum (DM) Noise Contours

SK02b Link Road Alignment, East of Allbrook – $L_{A10,18h}$ Do Something (DS) Noise Contours

SK02c Link Road Alignment, East of Allbrook – $L_{A10,18h}$ DM/DS Difference Noise Contours

SK03a Link Road Alignment, North West of Fair Oak – $L_{A10,18h}$ Do Minimum (DM) Noise Contours

SK03b Link Road Alignment, North West of Fair Oak – $L_{A10,18h}$ Do Something (DS) Noise Contours

SK03c Link Road Alignment, North West of Fair Oak – $L_{A10,18h}$ DM/DS Difference Noise Contours

SK04a Link Road Alignment, East of Fair Oak – $L_{A10,18h}$ Do Minimum (DM) Noise Contours

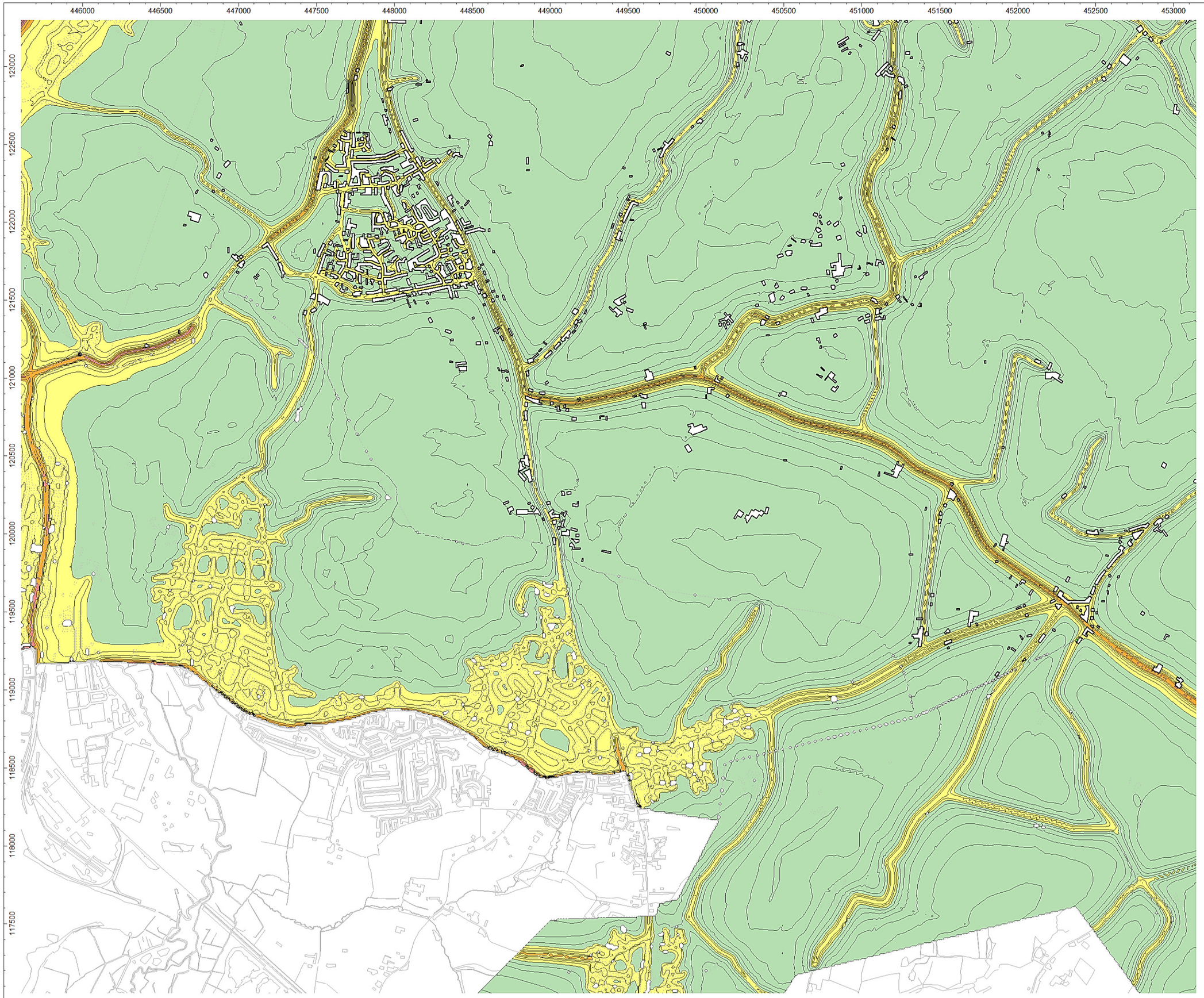
SK04b Link Road Alignment, East of Fair Oak – $L_{A10,18h}$ Do Something (DS) Noise Contours

SK04c Link Road Alignment, East of Fair Oak – $L_{A10,18h}$ DM/DS Difference Noise Contours

SK05a South Downs National Park – $L_{A10,18h}$ Do Minimum (DM) Noise Contours

SK05b South Downs National Park – $L_{A10,18h}$ Do Something (DS) Noise Contours

SK05c South Downs National Park – $L_{A10,18h}$ DM/DS Difference Noise Contours



Client:

Highwood Land LLP and Galliford Try Partnerships

Project:

Eastleigh Strategic Growth Option

Project Number:

A107273

Drawing Title / Scenario:

Do Minimum Scenario LA10 18 Hour

Drawing Number:

SK01a

Noise Level (dB LA10):

- 0.0 - 55.0 dB
- 55.0 - 65.0 dB
- 65.0 - 68.0 dB
- >68.0 dB

Scale : Not to scale

Please note: Noise contour plots are for illustrative purposes only

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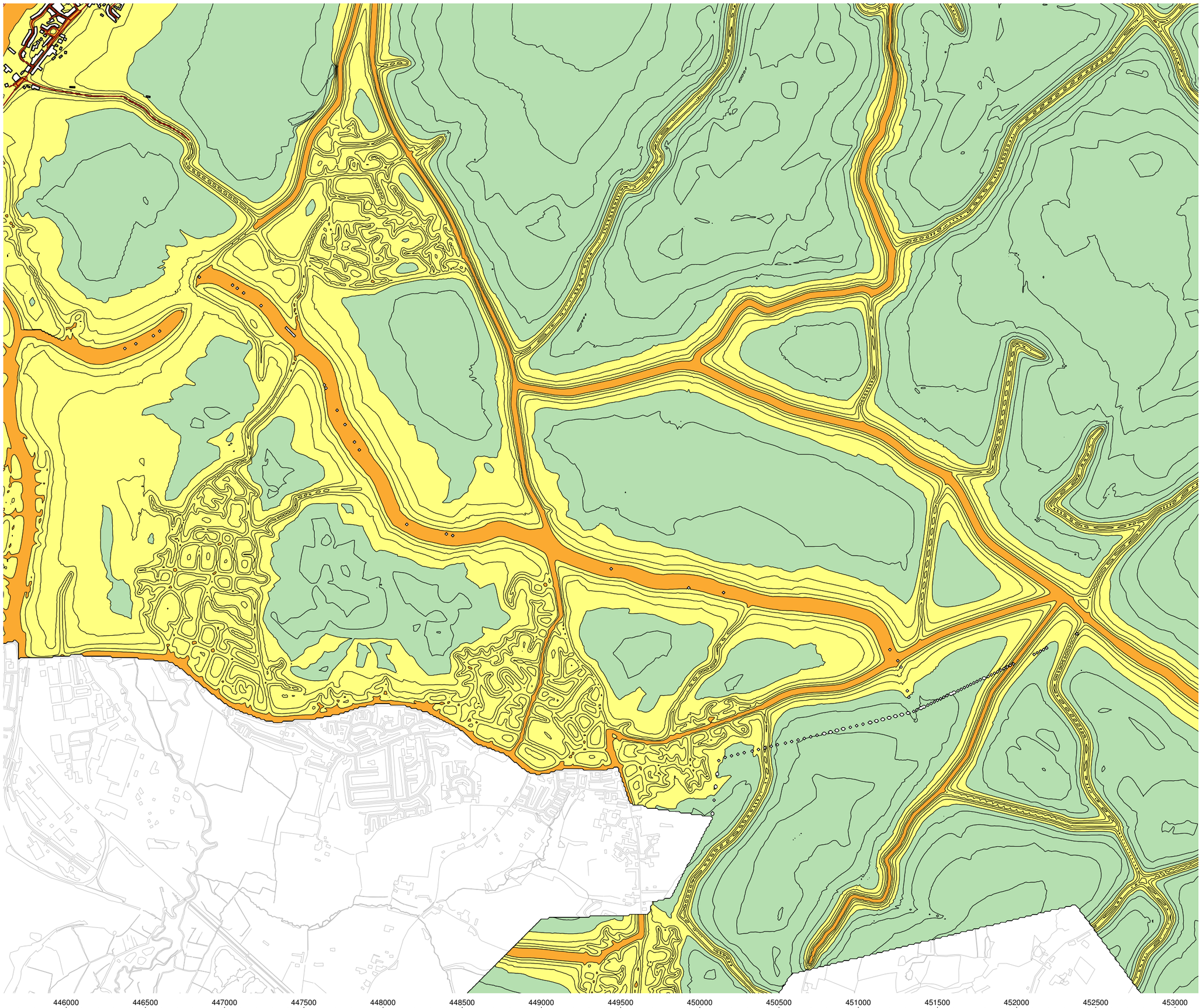
Tel 0116 234 8000



Client:
Highwood Land LLP and Galliford Try Partnerships

Project:
Eastleigh Strategic Growth Option

Project Number:
A107273

Drawing Title / Scenario:
Do Something Scenario LA10 18 Hour

Drawing Number:
SK01b

Noise Level (dB LA10):

- 0.0 - 50.0 dB
- 50.0 - 60.0 dB
- 60.0 - 70.0 dB
- >70.0 dB

Scale : Not to scale

Please note: Noise contour plots are for illustrative purposes only

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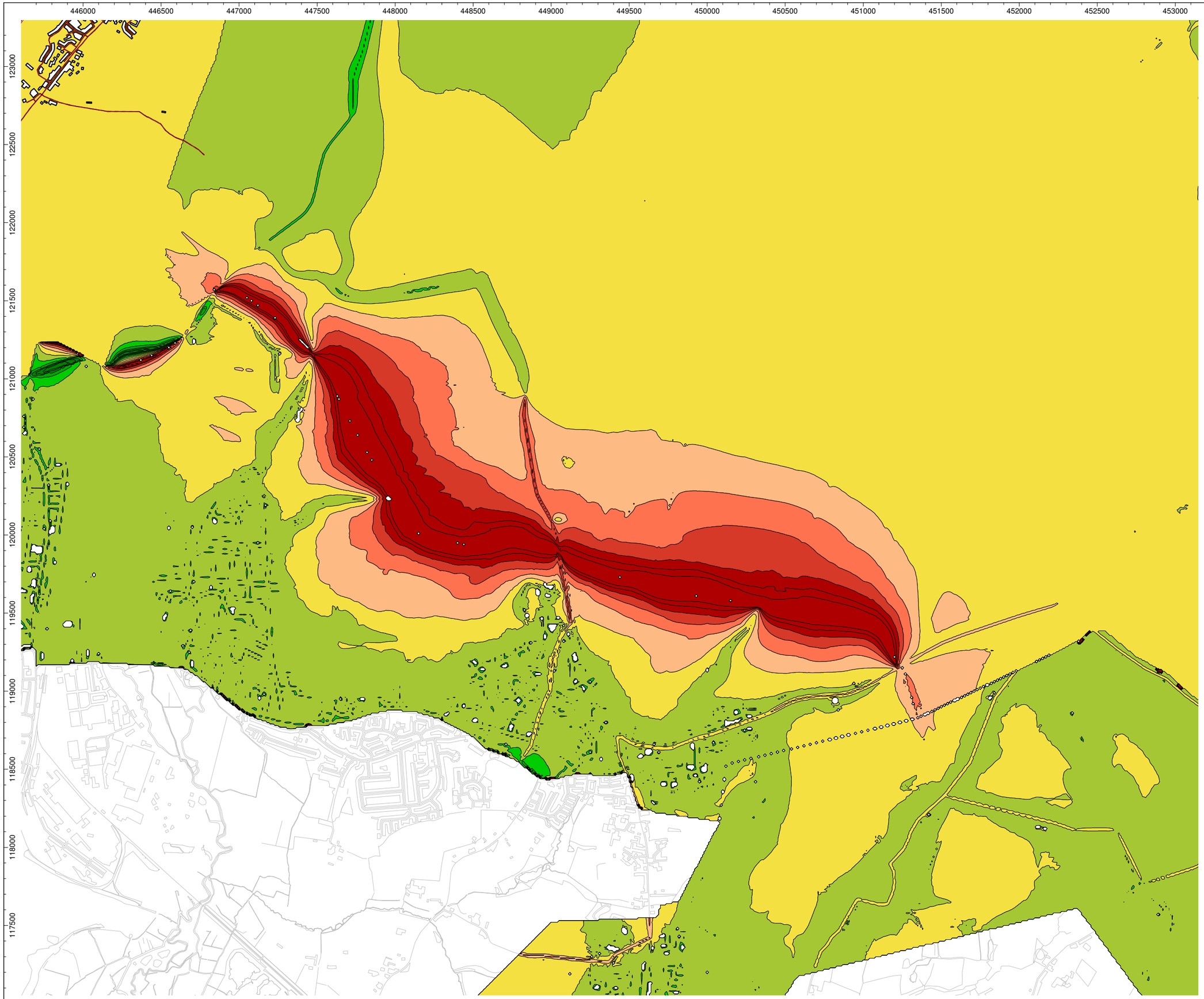

Client:
Highwood Land LLP and Galliford Try Partnerships

Project:
Eastleigh Strategic Growth Option

Project Number:
A107273

Drawing Title / Scenario:
Contribution From Potential Access Road LA10 18 Hour

Drawing Number:
SK01c

Change in Noise Level (dB LA10):

- >= -10
- >= -5
- >= -3
- >= -0
- >= 0
- >= 3
- >= 5
- >= 10

Scale : Not to scale

Please note: Noise contour plots are for illustrative purposes only

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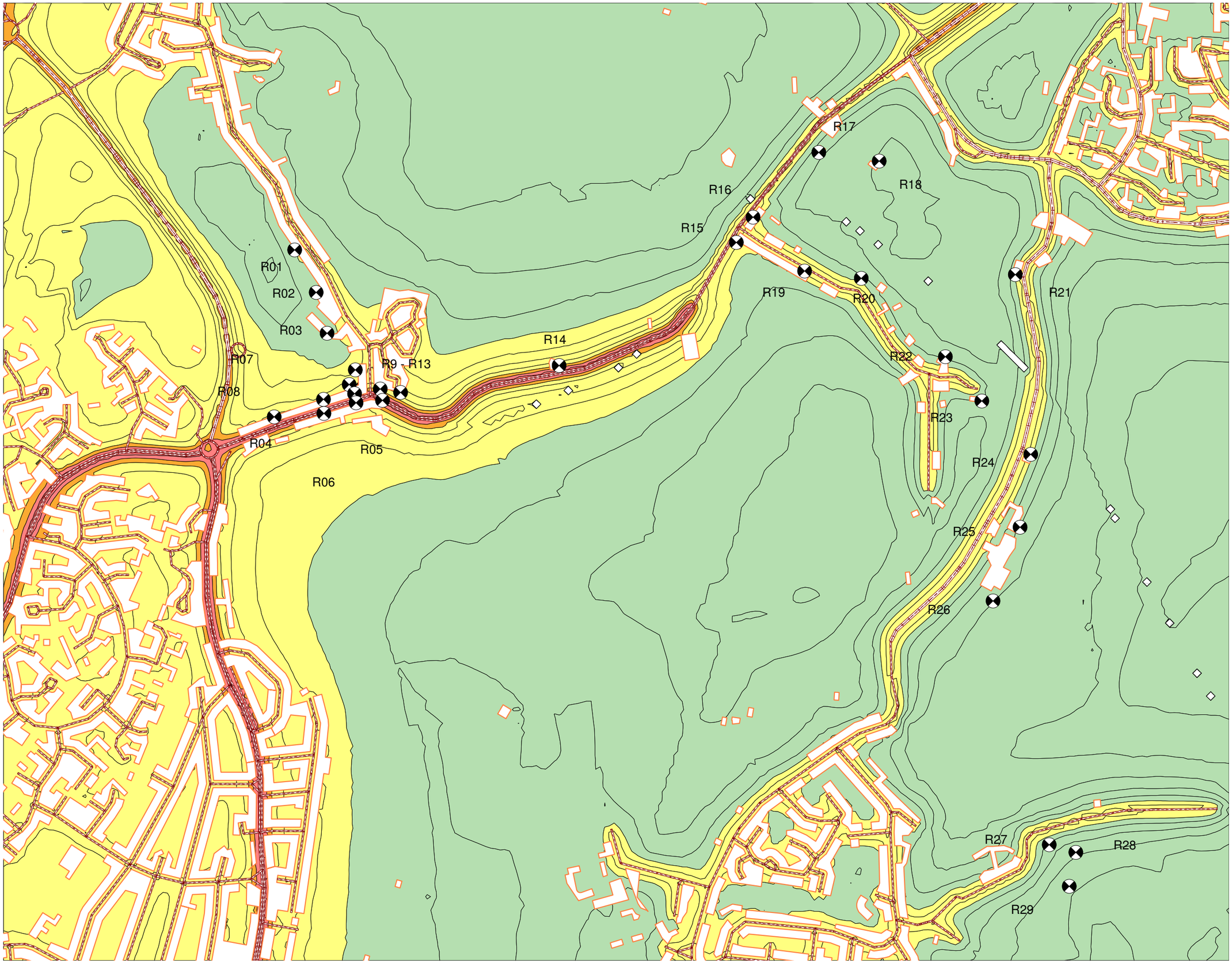

Client:
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Project:
Eastleigh Strategic Growth Option

Project Number:
A107273

Drawing Title / Scenario:
Do Minimum Scenario LA10 18 Hour

Drawing Number:
SK02A

Noise Level (dB LA10):

- 0.0 - 55.0 dB
- 55.0 - 65.0 dB
- 65.0 - 68.0 dB
- >68.0 dB

Scale : Not to scale

Please note: Noise contour plots are for illustrative purposes only

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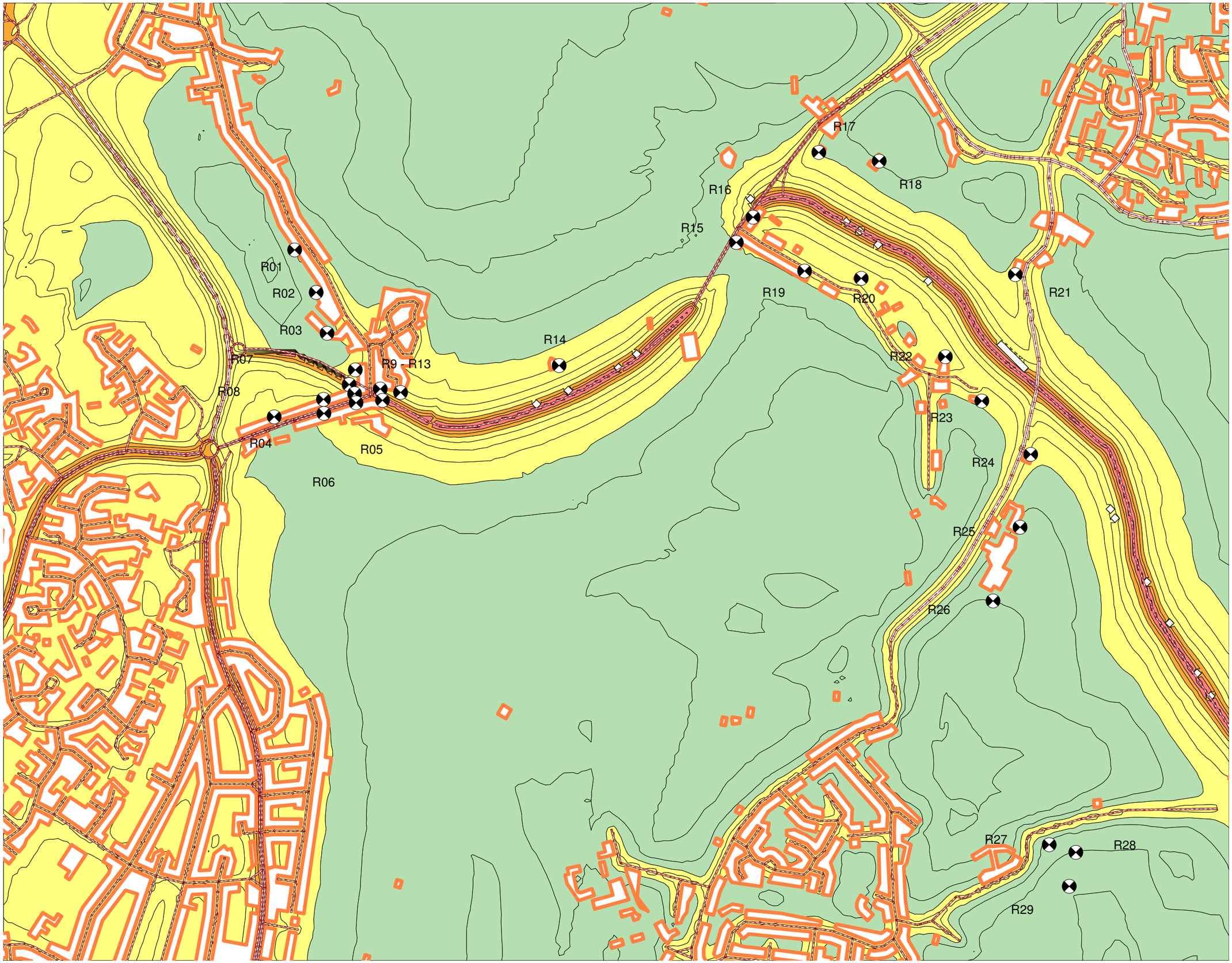

Client:
Highwood Land LLP and Galliford Try Partnerships

Project:
Eastleigh Strategic Growth Option

Project Number:
A107273

Drawing Title / Scenario:
Do Something Scenario LA10 18 Hour

Drawing Number:
SK02b

Noise Level (dB LA10):

- 0.0 - 55.0 dB
- 55.0 - 65.0 dB
- 65.0 - 68.0 dB
- >68.0 dB

Scale : Not to scale

Please note: Noise contour plots are for illustrative purposes only

WYGE Leicester 30.05.18

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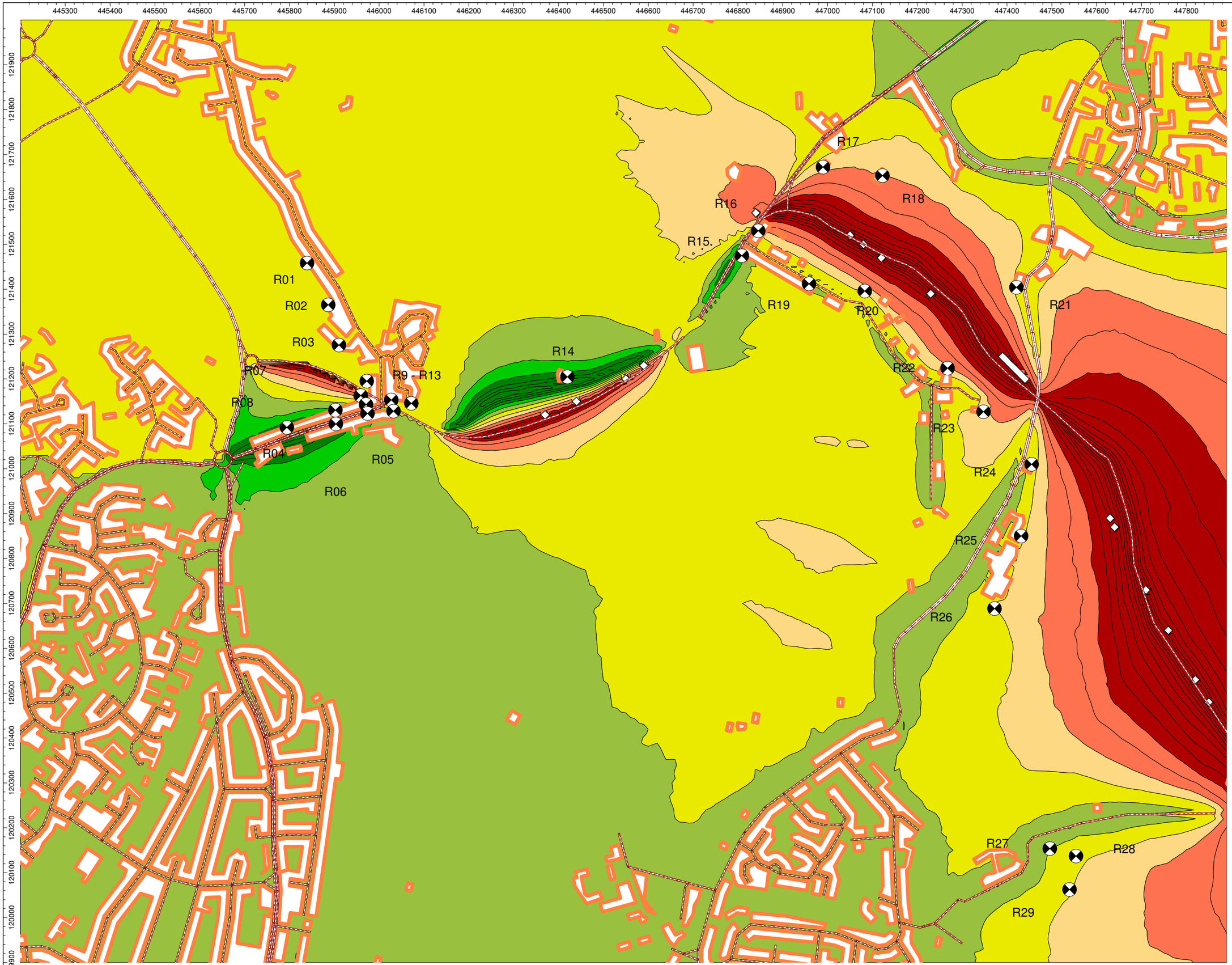

Client:
Highwood Land LLP and Galliford Try Partnerships

Project:
Eastleigh Strategic Growth Option

Project Number:
A107273

Drawing Title / Scenario:
Contribution From Potential Access Road LA10 18 Hour

Drawing Number:
SK02c

Change in Noise Level (dB LA10):

- ... < -5
- -5 <= ... < -3
- -3 <= ... < -0
- -0 <= ... < 0
- 0 <= ... < 3
- 3 <= ... < 5
- 5 <= ... < 10
- 10 <= ...

Scale : Not to scale

Please note: Noise contour plots are for illustrative purposes only

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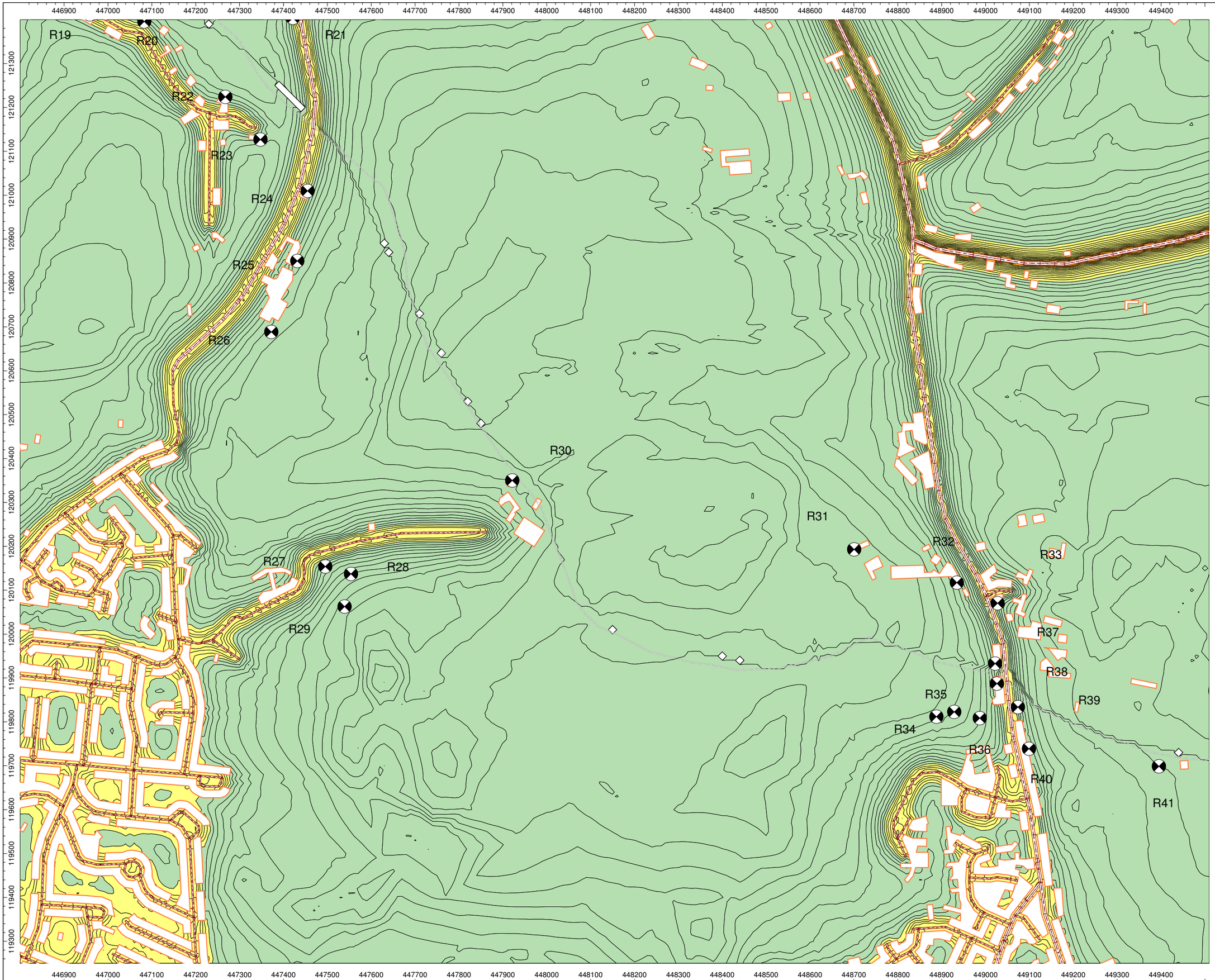

Client:
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Project:
Eastleigh Strategic Growth Option

Project Number:
A107273

Drawing Title / Scenario:
Do Minimum Scenario LA10 18 Hour

Drawing Number:
SK03A

Noise Level (dB LA10):

- 0.0 - 55.0 dB
- 55.0 - 65.0 dB
- 65.0 - 68.0 dB
- >68.0 dB

Scale : Not to scale

Please note: Noise contour plots are for illustrative purposes only

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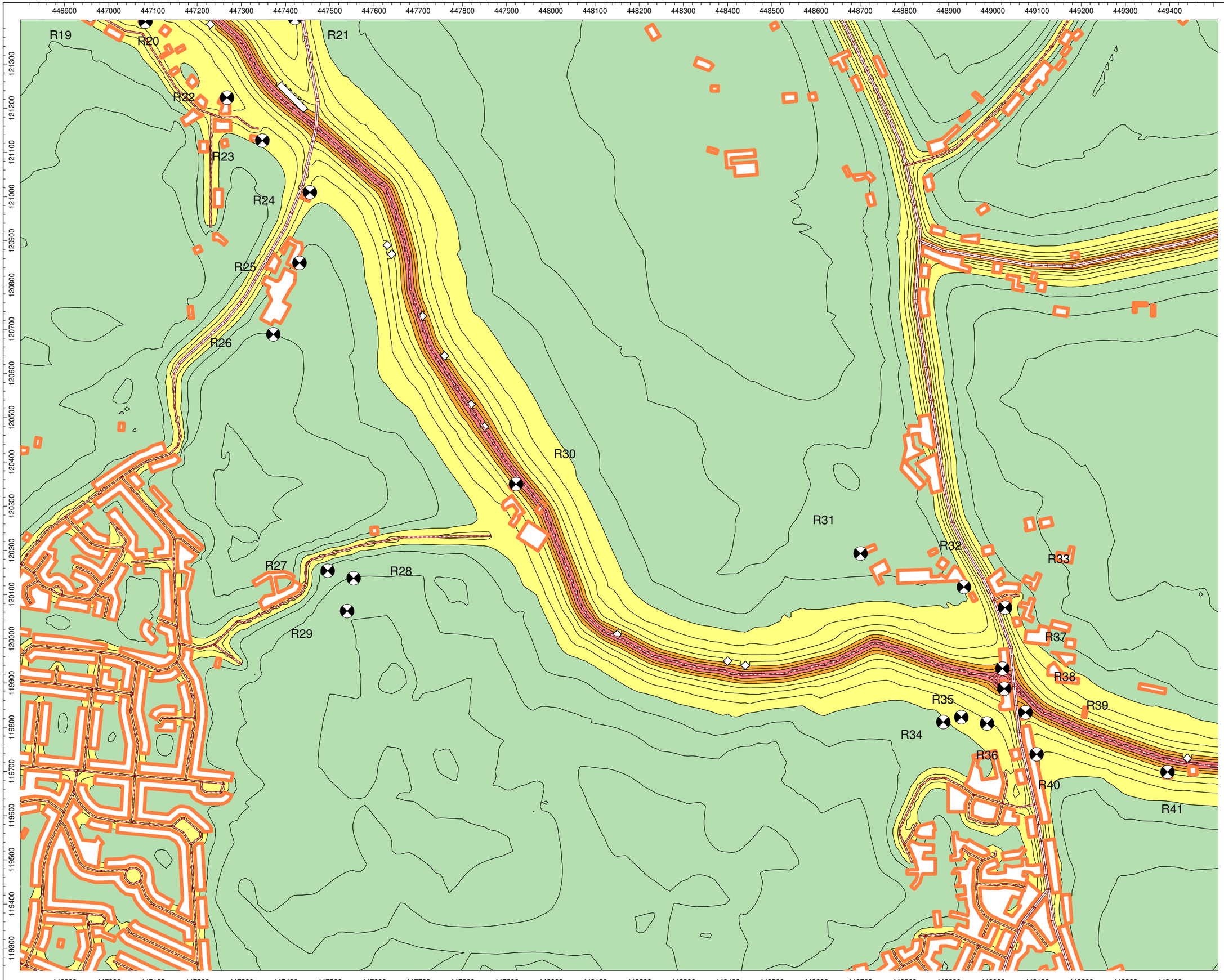

Client:
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Project:
Eastleigh Strategic Growth Option

Project Number:
A107273

Drawing Title / Scenario:
Do Something Scenario LA10 18 Hour

Drawing Number:
SK03b

Noise Level (dB LA10):

- 0.0 - 55.0 dB
- 55.0 - 65.0 dB
- 65.0 - 68.0 dB
- >68.0 dB

Scale : Not to scale

Please note: Noise contour plots are for illustrative purposes only

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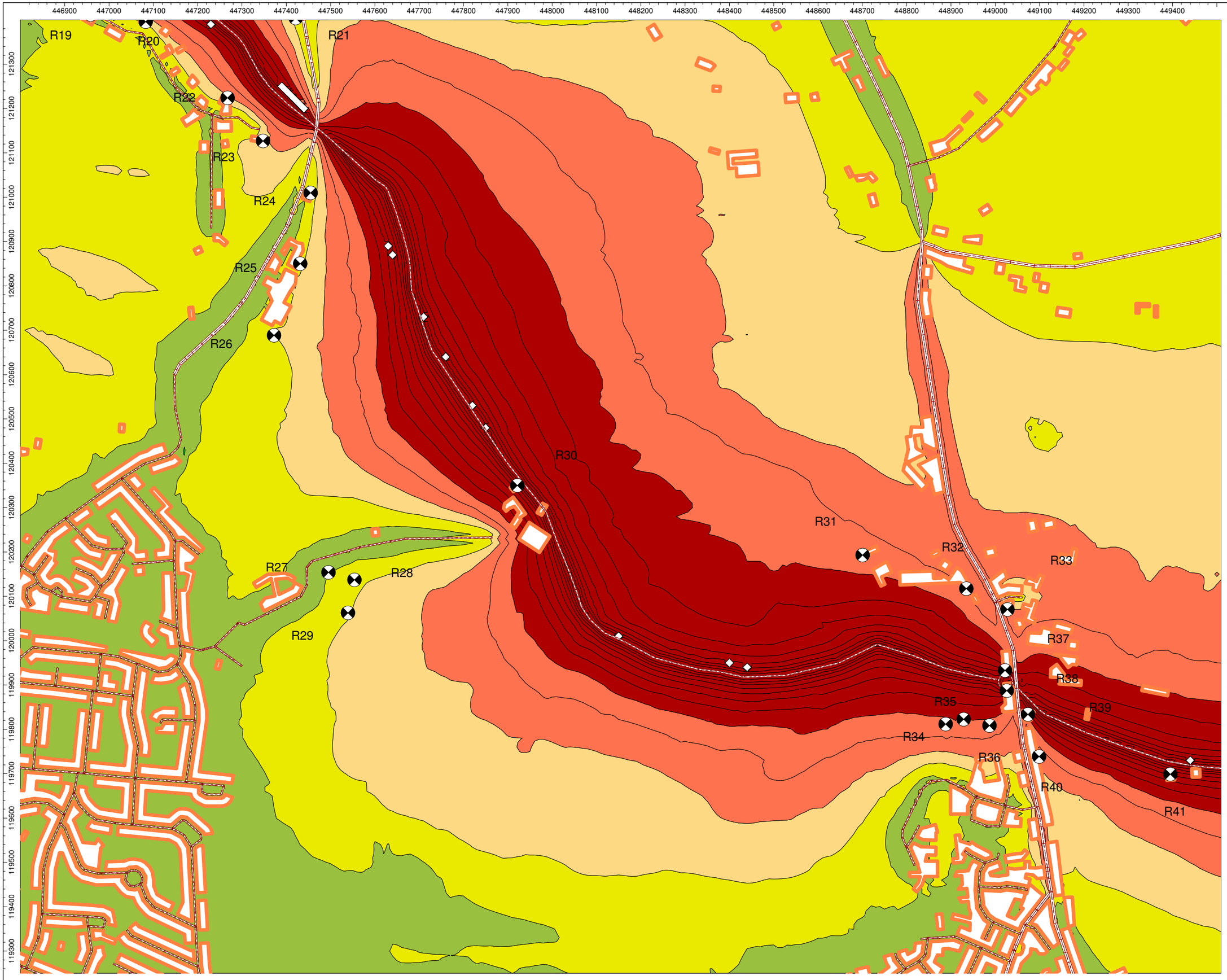

Client:
Highwood Land LLP and Galliford Try Partnerships

Project:
Eastleigh Strategic Growth Option

Project Number:
A107273

Drawing Title / Scenario:
Contribution From Potential Access Road LA10 18 Hour

Drawing Number:
SK03c

Change in Noise Level (dB LA10):

- ... < -5
- -5 <= ... < -3
- -3 <= ... < -0
- -0 <= ... < 0
- 0 <= ... < 3
- 3 <= ... < 5
- 5 <= ... < 10
- 10 <= ...

Scale : Not to scale

Please note: Noise contour plots are for illustrative purposes only

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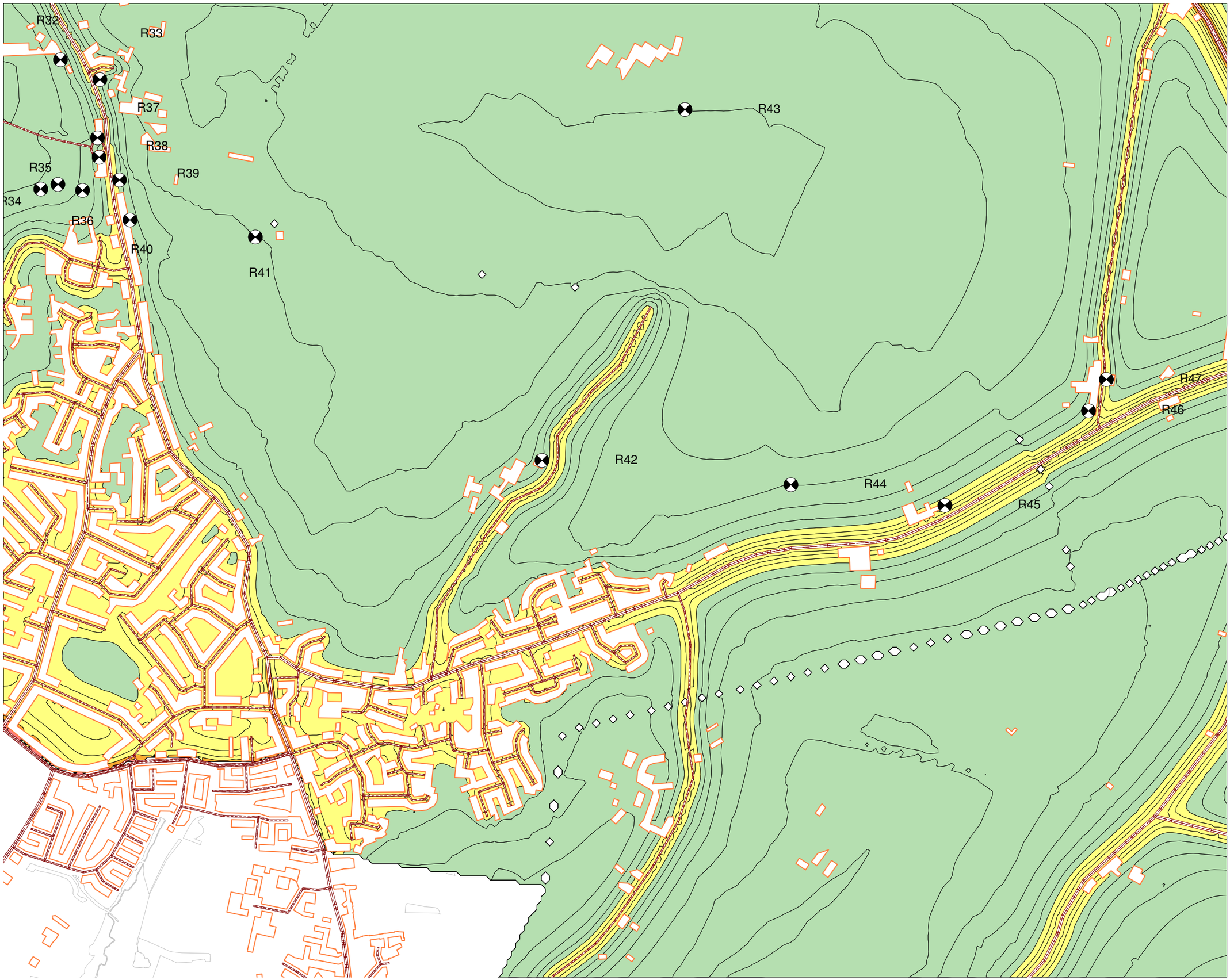

Client:
Highwood Land LLP and Galliford Try Partnerships

Project:
Eastleigh Strategic Growth Option

Project Number:
A107273

Drawing Title / Scenario:
Do Minimum Scenario LA10 18 Hour

Drawing Number:
SK04A

Noise Level (dB LA10):

- 0.0 - 55.0 dB
- 55.0 - 65.0 dB
- 65.0 - 68.0 dB
- >68.0 dB

Scale : Not to scale

Please note: Noise contour plots are for illustrative purposes only

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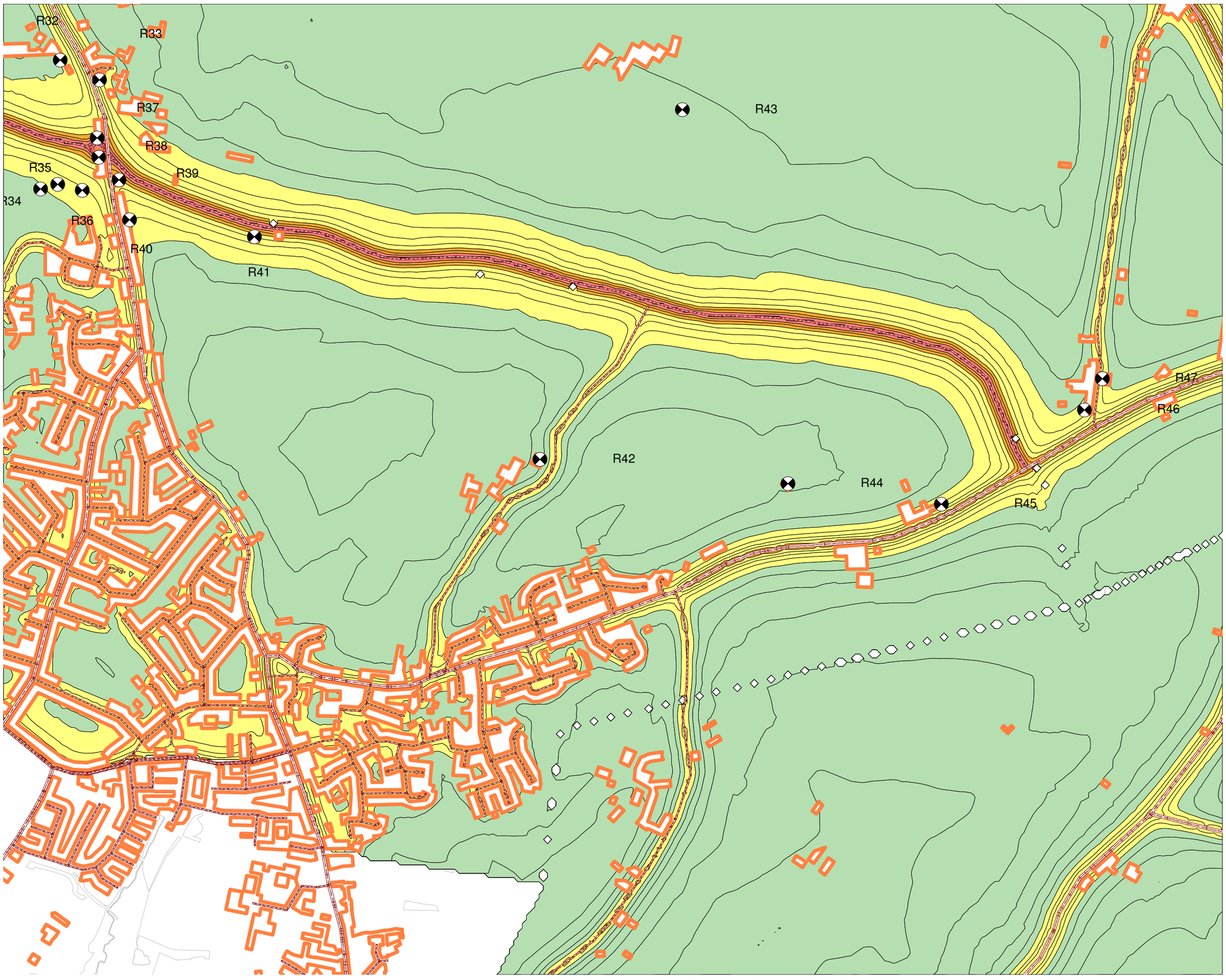

Client:
Highwood Land LLP and Galliford Try Partnerships

Project:
Eastleigh Strategic Growth Option

Project Number:
A107273

Drawing Title / Scenario:
Do Something Scenario LA10 18 Hour

Drawing Number:
SK04b

Noise Level (dB LA10):

- 0.0 - 55.0 dB
- 55.0 - 65.0 dB
- 65.0 - 68.0 dB
- >68.0 dB

Scale : Not to scale

Please note: Noise contour plots are for illustrative purposes only

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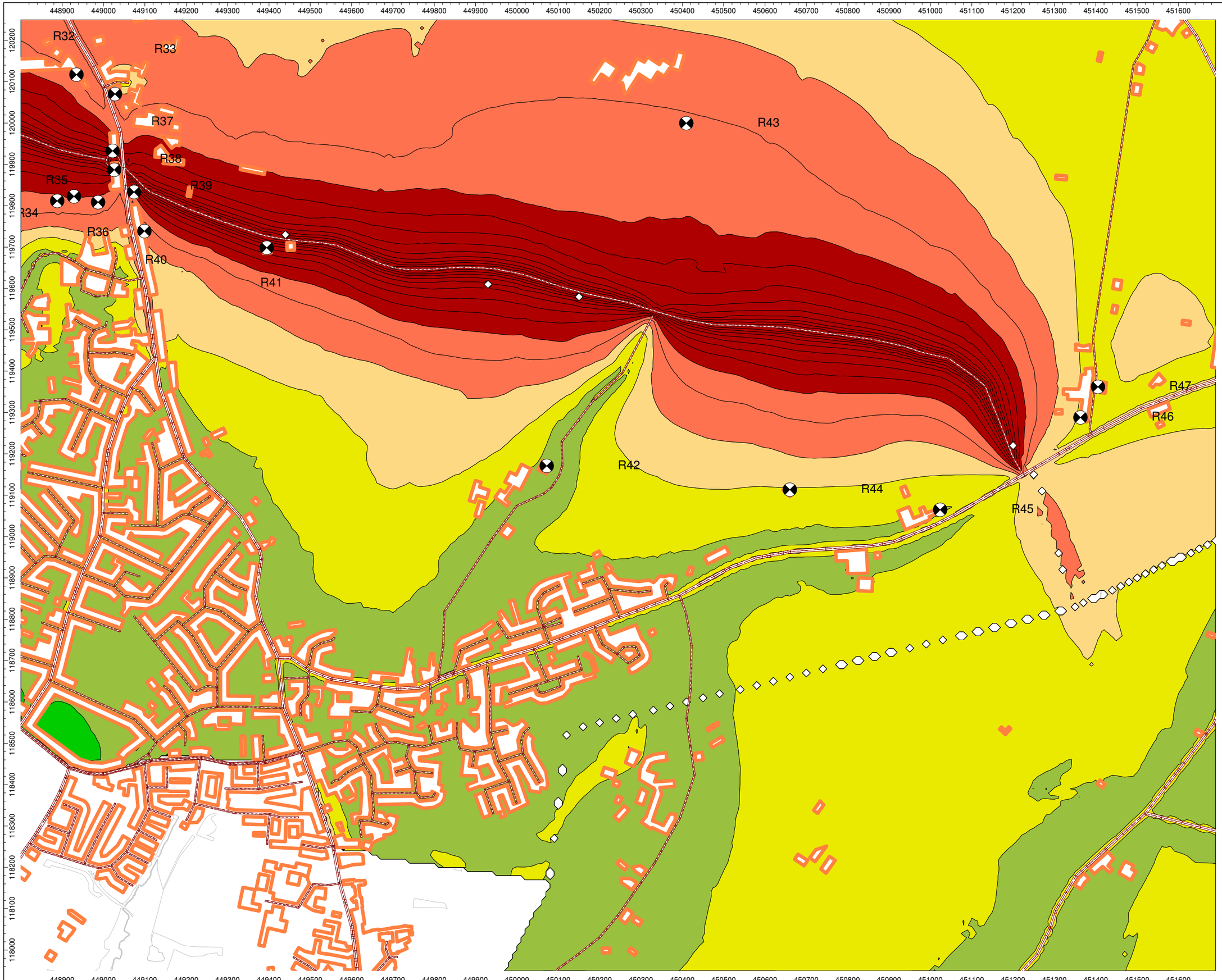

Client:
Highwood Land LLP and Galliford Try Partnerships

Project:
Eastleigh Strategic Growth Option

Project Number:
A107273

Drawing Title / Scenario:
Contribution From Potential Access Road LA10 18 Hour

Drawing Number:
SK04c

Change in Noise Level (dB LA10):

- ... < -5
- -5 <= ... < -3
- -3 <= ... < -0
- -0 <= ... < 0
- 0 <= ... < 3
- 3 <= ... < 5
- 5 <= ... < 10
- 10 <= ...

Scale : Not to scale

Please note: Noise contour plots are for illustrative purposes only

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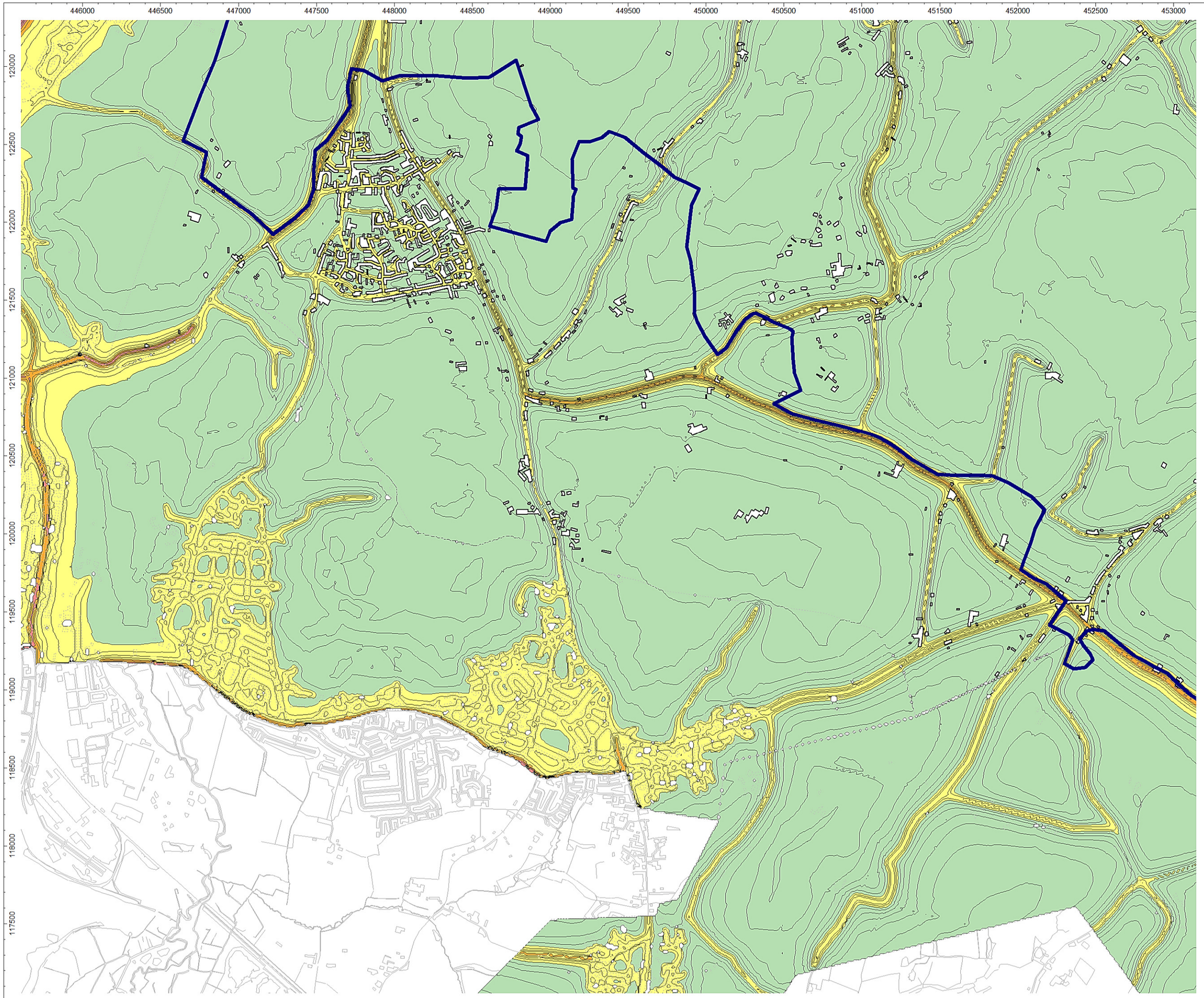

Client:
Highwood Land LLP and Galliford Try Partnerships

Project:
Eastleigh Strategic Growth Option

Project Number:
A107273

Drawing Title / Scenario:
Do Minimum Scenario
LA10 18 Hour

South Downs National Park

Drawing Number:
SK05A

Noise Level (dB LA10):

- 0.0 - 55.0 dB
- 55.0 - 65.0 dB
- 65.0 - 68.0 dB
- >68.0 dB

South Downs National Park Boundary:

Scale : Not to scale

Please note: Noise contour plots are for illustrative purposes only

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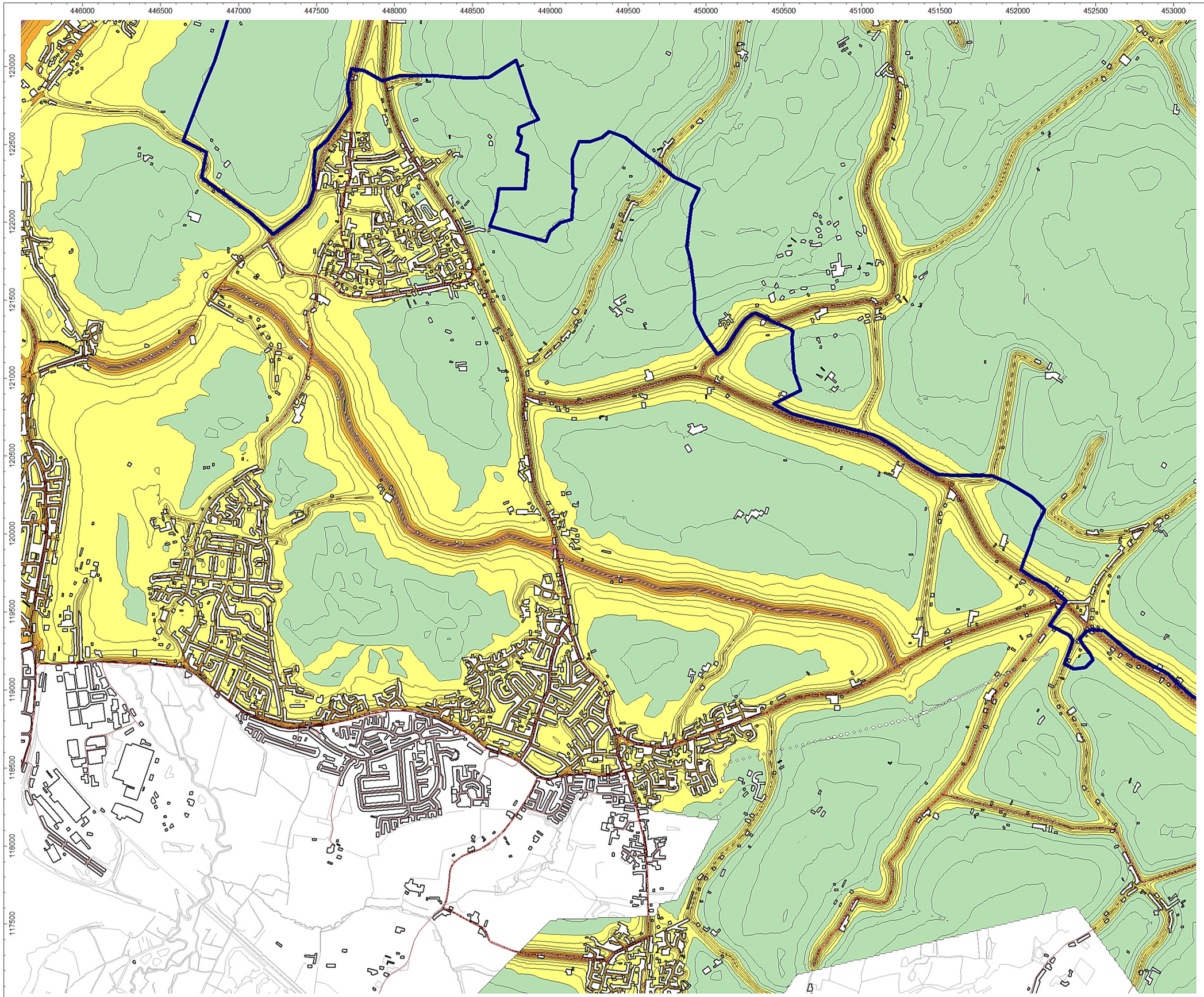

Client:
Highwood Land LLP and Galliford Try Partnerships

Project:
Eastleigh Strategic Growth Option

Project Number:
A107273

Drawing Title / Scenario:
Do Something Scenario
LA10 18 Hour

South Downs National Park

Drawing Number:
SK05b

Noise Level (dB LA10):

- 0.0 - 50.0 dB
- 50.0 - 60.0 dB
- 60.0 - 70.0 dB
- >70.0 dB

South Downs National Park Boundary:

Scale : Not to scale

Please note: Noise contour plots are for illustrative purposes only

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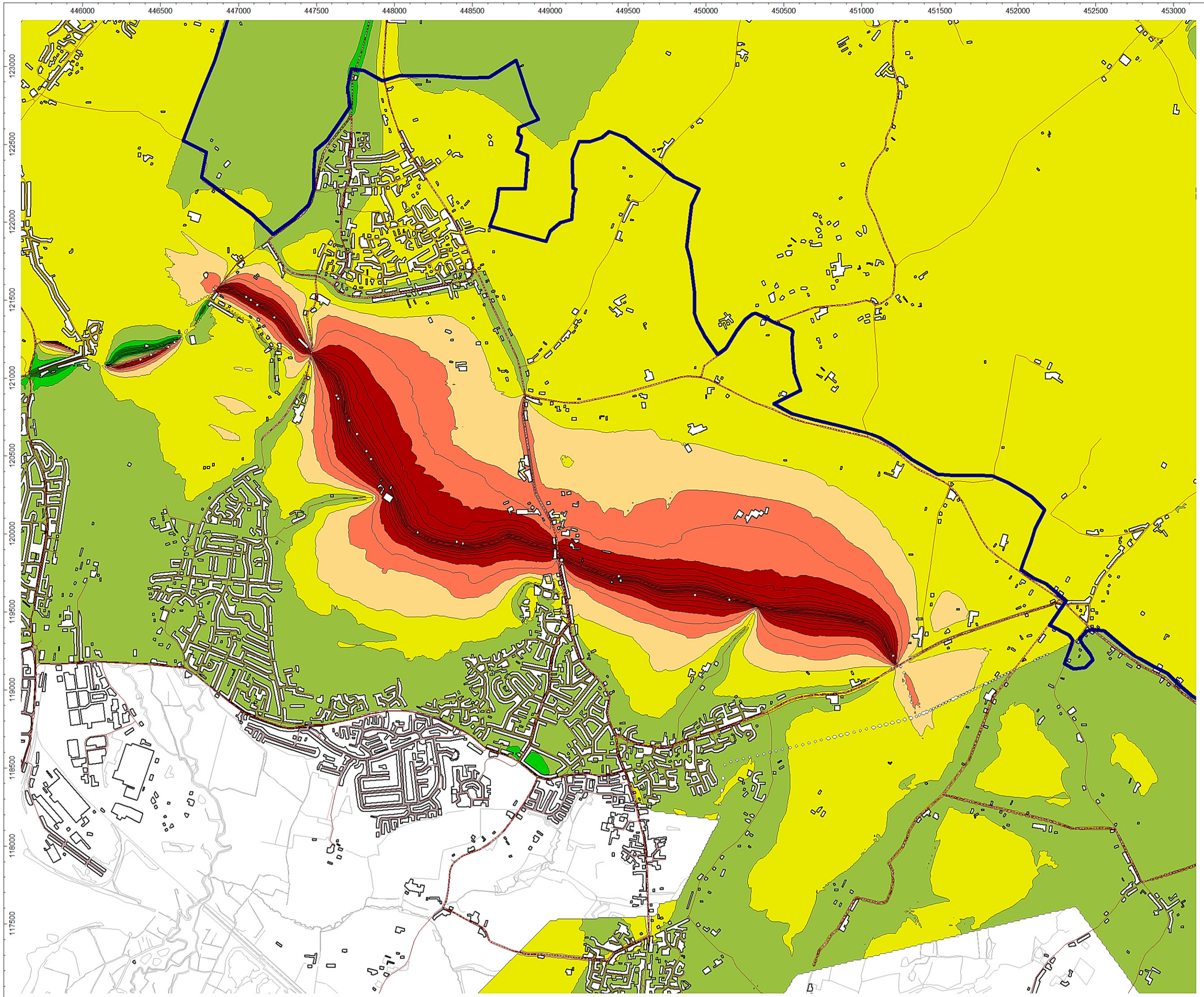

Client:
Highwood Land LLP and Galliford Try Partnerships

Project:
Eastleigh Strategic Growth Option

Project Number:
A107273

Drawing Title / Scenario:
Contribution From Potential Access Road LA10 18 Hour

South Downs National Park

Drawing Number:
SK05c

Change in Noise Level (dB LA10):

- ... < -5
- -5 <= ... < -3
- -3 <= ... < -0
- -0 <= ... < 0
- 0 <= ... < 3
- 3 <= ... < 5
- 5 <= ... < 10
- 10 <= ...

South Downs National Park Boundary:

Scale : Not to scale

Please note: Noise contour plots are for illustrative purposes only

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Appendix B – Traffic Data

Table B1 Traffic Data (2036)

Road	Do Minimum	HGV %	Do Something	HGV %	Do More	HGV %
Windhover Rbt - W End Rd Arm Off	7867	2	8230	2	8273	1
Windhover Rbt - W End Rd Arm Off	7867	2	8230	2	8273	1
Portsmouth Rd WB (W)	7077	1	7159	1	7189	1
Portsmouth Rd EB (W)	9396	2	9357	2	9329	2
Portsmouth Rd WB (W)	9229	1	9331	1	9372	1
Portsmouth Rd EB (W)	11039	2	11038	2	11001	2
Portsmouth Rd WB (W)	9677	1	9823	1	9842	1
Portsmouth Rd EB (W)	9405	1	9390	1	9322	1
Portsmouth Rd WB (W)	9126	1	9268	1	9308	1
Portsmouth Rd EB (W)	7681	1	7475	1	7424	1
Windhover Rbt - Bursledon Rd Arm On	10953	5	11112	5	11025	5
Windhover Rbt - W End Rd Arm On	6151	5	6217	6	6260	6
A27 Bridge Rd EB	16809	4	16857	4	17093	4
A27 Bridge Rd WB	13453	3	13453	3	13504	3
A27 Bridge Rd WB	16396	3	16134	3	16391	3
A27 Bridge Rd EB	16981	4	17016	4	17109	4
A27 Bridge Rd EB	9975	6	10001	6	9959	6
A27 Providence Hill WB	5217	7	5236	6	5307	6
Portsmouth Rd WB (E)	9116	6	9109	6	9069	6
A27 Bridge Rd WB	16389	3	16108	3	16202	3
A27 Bridge Rd EB	16398	3	16435	3	16533	3
A27 Bridge Rd WB	16316	2	16023	2	16130	2
A27 Bridge Rd EB	16985	3	17110	3	17498	3
A27 Bridge Rd WB	16316	2	16023	2	16130	2
A27 River Hamble Crossing EB	16771	3	16887	3	17207	3
M27 River Hamble Crossing EB	84206	7	84327	7	84309	7
A27 Providence Hill EB	5758	19	5795	18	5718	18
A27 Providence Hill WB	6108	6	6112	6	6175	6
Windhover Rbt - A3024 Arm (for M27) Off	23443	6	23576	6	23421	6
Windhover Rbt - Bursledon Rd Arm Off	10597	7	10619	7	10672	7
Windhover Rbt - Providence Hill Arm Off	6685	17	6802	17	6733	17
Windhover Rbt - Hamble Lane Arm Off	12244	6	12435	6	12586	6
Windhover Rbt - A3024 Arm (for M27) Off	23443	6	23576	6	23421	6
Windhover Rbt - Providence Hill Arm Off	6685	17	6802	17	6733	17
Windhover Rbt - Hamble Lane Arm Off	12244	6	12435	6	12586	6
Windhover Rbt - Bursledon Rd Arm Off	10597	7	10619	7	10672	7
A3025 NB Hamble Lane - A3025 Portsmouth Rd	16683	4	16985	4	16976	4
A3025 SB Hamble Lane - A3025 Portsmouth Rd	19702	4	19907	4	20021	4
Jurd Way EB	6541	1	6488	1	6462	1
A3025 SB Hamble Lane - A3025 Portsmouth Rd	12081	6	12269	6	12418	6

A3025 NB Hamble Lane - A3025 Portsmouth Rd	16955	4	17261	4	17253	4
Portsmouth Rd WB (W)	8345	1	8203	1	8214	1
A3025 NB Hamble Lane - A3025 Portsmouth Rd	19179	3	19503	3	19558	3
Windhover Rbt - Hamble Lane Arm On	16955	4	17261	4	17253	4
A3025 SB Hamble Lane - A3025 Portsmouth Rd	12245	6	12435	6	12586	6
A27 Providence Hill EB	6587	17	6702	17	6634	17
Windhover Rbt - Providence Hill Arm On	6200	6	6203	6	6268	6
Windhover Rbt - A3024 Arm (for M27) On	20845	11	21146	11	21143	11
Portsmouth Rd EB (E)	5431	1	5425	1	5423	1
Jurd Way WB	11376	3	11318	3	11201	3
Kings Copse Ave NB	3909	0	4449	0	4112	0
Kings Copse Ave SB	6307	0	6349	0	7768	0
Woodhouse Lane NB	4419	2	11275	2	12981	2
A334 Broad Oak EB	10076	6	1932	11	2059	14
Kings Copse Ave SB	6565	0	6504	0	8313	0
A334 Grange St NB	8714	6	8164	6	9147	5
Woodhouse Lane SB	3743	3	8818	1	13011	2
Woodhouse Lane NB	4050	1	12012	3	13494	2
A334 Broad Oak WB	11142	4	3222	14	2001	10
A334 Botley High St EB	10076	6	1932	11	2059	14
A334 Botley High St WB	9264	6	1256	17	1368	21
B3354 Botley Winchester St SB	3174	0	31	0	31	0
B3354 Botley Winchester St NB	2828	0	593	0	676	0
B3354 Botley Winchester St NB	2266	0	31	0	31	0
Woodhouse Lane NB	4112	1	9628	4	10521	3
Woodhouse Lane SB	2314	3	8483	1	11111	3
Kings Copse Ave SB	5957	0	5975	0	7578	0
Kings Copse Ave NB	4632	0	5157	0	5464	0
Woodhouse Lane SB	2235	3	7834	4	8320	3
B3354 Botley Winchester St SB	3903	0	838	0	777	0
B3342 Moorgreen Meadows SB	5927	2	6368	2	6374	2
A334 Grange St SB	10301	5	9892	5	10416	5
A334 Grange St NB	13560	6	13261	6	13627	6
A334 Grange St SB	10634	6	11078	4	11394	4
A334 Grange St NB	11831	6	11516	6	11913	6
B3342 Moorgreen Meadows NB	8143	4	8402	4	8111	4
B3342 Moorgreen Meadows NB	5110	6	6323	5	5141	6
B3342 Moorgreen Meadows SB	8231	2	8729	2	8429	2
M27 River Itchen Crossing WB	95637	8	95601	7	95356	8
B3342 Moorgreen Meadows SB	10989	2	11248	2	11168	2
B3342 Moorgreen Meadows NB	4176	7	4452	6	4021	7
B3342 Moorgreen Meadows NB	5294	6	5810	5	5319	6
B3342 Moorgreen Meadows SB	6056	3	6383	3	6238	3

A334 Grange St SB	12801	5	12355	5	12894	5
Kings Copse Ave NB	4139	0	4693	0	4178	0
Bishopstoke Rd to Botley Rd Jct WB	4279	3	4744	3	5187	3
Bishopstoke Rd to Botley Rd Jct EB	1515	8	1997	6	1968	6
Bishopstoke Rd to Botley Rd Jct WB	5074	3	5694	3	6033	3
Bishopstoke Rd to Botley Rd Jct WB	8140	3	8511	3	8583	3
Bishopstoke Rd to Botley Rd Jct EB	5477	4	6020	4	6042	4
Bishopstoke Rd to Botley Rd Jct EB	4123	3	5316	2	4921	3
Bishopstoke Rd to Botley Rd Jct WB	6955	3	7396	2	7421	2
Bishopstoke Rd to Botley Rd Jct EB	5776	3	6900	2	6502	2
Bishopstoke Rd to Botley Rd Jct WB	6219	3	6622	3	6690	3
Bishopstoke Rd to Botley Rd Jct EB	4631	3	5846	2	5404	2
Bishopstoke Rd to Botley Rd Jct WB	6955	3	7396	2	7421	2
Bishopstoke Rd to Botley Rd Jct EB	4897	3	6085	2	5715	2
B3037 River Itchen Crossing WB	9732	4	10999	3	10555	4
Bishopstoke Rd to Botley Rd Jct WB	6869	2	7333	2	7382	2
Bishopstoke Rd to Botley Rd Jct EB	6409	2	7653	2	7209	2
Bishopstoke Rd to Botley Rd Jct EB	4631	3	5846	2	5404	2
Bishopstoke Rd to Botley Rd Jct WB	8408	2	8902	2	8928	2
M3 - J12 SB On Slip	8568	1	13206	2	0	0
M3 NB J14 to J12	74613	11	73848	11	73119	11
M3 - J12 NB Off Slip	6528	5	5261	2	7984	4
M3 SB J12 to J14	81289	9	85727	9	86348	9
M3 SB J12 to J14	72257	11	71841	11	71827	11
M3 - J12 SB Off Slip	6795	4	7303	4	6696	4
M3 SB J12 to J14	79396	10	79514	10	78863	10
M3 - J12 SB Off Slip	6672	4	7185	4	6568	4
M3 - J12 SB On Slip	8568	1	13206	2	13822	2
B3335 Allbrook Hill EB	5292	3	0	0	0	0
A335 Twyford Rd SB	8065	0	8149	0	8519	0
Woodside Ave SB	2540	8	2449	5	2800	5
B3335 Allbrook Hill WB	6487	2	0	0	1983	2
B335 Channel of River Itchen Crossing near Railw EB	6925	2	6761	2	7981	2
A335 Twyford Rd NB	9207	0	9176	0	9057	0
A335 Twyford Rd SB	8300	0	8273	0	8556	0
Woodside Ave NB	2360	13	2881	21	2240	17
Woodside Ave SB	2636	9	2568	7	2695	7
Woodside Ave NB	4352	8	4994	12	4411	9
Woodside Ave SB	1153	15	1146	10	1326	10
M3 NB J14 to J12	81472	10	79375	10	81508	10
Woodside Ave NB	5912	8	6496	12	5713	9
Woodside Ave SB	6958	14	6774	13	6873	13
Woodside Ave NB	3858	9	4504	14	3713	12
Woodside Ave SB	4198	10	4179	8	4313	8

M3 SB J12 to J14	74132	9	77963	8	78260	8
M3 - J13 SB Off Slip	6811	16	7390	15	7698	14
M3 - J13 SB Off Slip	81288	9	85728	9	86348	9
A335 Twyford Rd NB	8923	0	8768	0	8579	0
A335 Twyford Rd SB	10868	0	10799	0	11039	0
A335 Southampton Rd NB	8103	1	8539	1	8278	1
A335 Southampton Rd SB	12339	2	13147	2	13076	2
A335 Southampton Rd NB	8922	6	9397	6	9147	6
A335 Southampton Rd SB	13436	3	14036	3	13918	3
A335 Twyford Rd NB	10631	0	10541	0	10322	0
A335 Station Hill SB	6782	1	6545	1	6736	1
A335 Romsey Rd WB	6481	5	6152	5	6155	5
A335 Southampton Rd SB	12967	4	13640	3	13559	4
A335 Southampton Rd NB	8105	1	8700	1	8425	1
A335 Southampton Rd SB	12423	2	13285	2	13220	2
A335 Station Hill NB	8143	1	8579	1	8317	1
A335 Southampton Rd NB	8011	1	8392	1	8125	1
A335 Southampton Rd SB	12291	2	13094	2	13028	2
A335 Leigh Rd EB	5913	8	6077	8	5917	8
A335 Leigh Rd WB	7004	17	7035	18	7106	17
A335 Leigh Rd WB	5492	7	5245	8	5299	7
A335 Romsey Rd EB	5913	8	6078	8	5917	8
A335 Romsey Rd EB	7211	5	7556	4	7310	5
A335 Romsey Rd WB	6462	5	6327	5	6317	5
A335 Romsey Rd WB	5512	7	5249	8	5303	7
A335 Romsey Rd EB	6886	5	7195	5	6953	5
A335 Leigh Rd WB	6703	19	6637	20	6671	19
A335 Leigh Rd EB	5353	17	5282	17	5249	18
A335 Leigh Rd EB	14078	13	14435	12	13739	13
M3 - J13 SB On Slip	8394	10	7695	10	7626	9
A335 Leigh Rd WB	9366	17	9441	14	10007	14
Woodside Ave NB	8642	10	9050	13	8266	11
A335 Leigh Rd EB	5353	17	5282	17	5250	18
A335 Leigh Rd WB	12259	16	11821	14	12047	15
Passfield Ave SB	6789	12	6940	11	6954	11
A335 Leigh Rd WB	6703	19	6637	20	6671	19
A335 Leigh Rd EB	7375	13	7619	13	7502	13
M3 NB J14 to J12	74278	10	73058	9	74903	9
M3 - J13 NB Off Slip	11616	6	12764	6	11881	6
M3 - J13 SB Off Slip	6811	16	7390	15	7698	14
M3 - J13 SB Off Slip	6811	16	7390	15	7698	14
M3 - J13 SB On Slip	8394	10	7695	10	7626	9
Passfield Ave NB	6677	7	6956	7	6734	7
Passfield Ave SB	6524	9	6698	9	6689	9

Passfield Ave SB	6524	9	6698	9	6689	9
Passfield Ave NB	7464	8	7779	8	7568	8
Passfield Ave NB	5582	10	5587	10	5487	10
Passfield Ave SB	7885	10	8093	10	8119	10
A335 Leigh Rd EB	6642	13	6928	12	6776	13
A335 Leigh Rd WB	7891	16	7871	17	7950	17
M3 SB J12 to J14	38128	4	39396	4	39528	4
M3 SB J12 to J14	38128	4	39396	4	39528	4
M3 - J13 NB On Slip	81472	10	79375	10	81508	10
M3 - J13 NB On Slip	81472	10	79375	10	81508	10
M3 NB J14 to J12	86483	9	86468	9	87387	9
M3 - J13 SB Off Slip	6811	16	7390	15	7698	14
M3 - J13 SB On Slip	8394	10	7695	10	7626	9
M3 NB J14 to J12	81472	10	79375	10	81508	10
A335 Wide Lane SB	10263	3	11346	2	11236	2
A335 Wide Lane NB	7101	12	7713	11	7528	11
Chestnut Ave WB	3359	3	3685	2	3824	2
Chestnut Ave EB	4992	2	5407	2	5287	2
Chestnut Ave EB	10833	3	10690	3	10659	3
Chestnut Ave WB	10618	3	10886	3	11027	3
Chestnut Ave WB	10030	4	10309	3	10449	3
Chestnut Ave EB	9813	5	10399	5	10214	5
Chestnut Ave EB	4257	2	4694	2	4605	2
Chestnut Ave WB	9559	7	9999	6	10084	6
Passfield Ave NB	5648	7	5800	8	5752	7
Chestnut Ave WB	10245	6	10678	6	10772	6
Chestnut Ave EB	9264	5	9868	5	9684	5
Passfield Ave SB	6838	8	6936	8	6930	8
Passfield Ave NB	8086	6	8279	6	8173	6
Passfield Ave NB	6677	7	6956	7	6734	7
Passfield Ave SB	7484	8	7623	8	7621	8
Chestnut Ave EB	10894	4	10972	3	11025	3
Chestnut Ave WB	10495	3	10846	3	10865	3
Chestnut Ave EB	13733	3	13560	3	13498	3
Chestnut Ave WB	11064	3	11328	3	11470	3
Chestnut Ave EB	13733	3	13560	3	13497	3
A335 Leigh Rd EB	10668	8	11575	7	10801	8
A335 Leigh Rd WB	8375	7	8942	6	8640	7
M3 - J13 NB On Slip	6838	19	6012	17	6283	18
A335 Leigh Rd EB	12847	8	12373	8	11619	8
A335 Leigh Rd WB	7834	19	7454	17	7639	18
A335 Leigh Rd EB	7755	8	7202	7	7062	7
A335 Leigh Rd WB	5205	9	5305	9	5302	9
A335 Leigh Rd EB	6234	9	6016	8	5961	8

A335 Leigh Rd WB	7792	7	8201	6	8060	7
M3 - J13 NB Off Slip	11615	6	12763	6	11881	6
M3 - J13 NB On Slip	6838	19	6012	17	6283	18
M3 - J13 NB Off Slip	11616	6	12764	6	11881	6
M3 - J13 NB On Slip	6838	19	6012	17	6283	18
A335 Leigh Rd EB	2999	11	2938	11	2938	11
M3 SB J12 to J14	81288	9	85728	9	86348	9
M3 SB J12 to J14	81288	9	85728	9	86348	9
M3 - J12 NB On Slip	6160	6	8540	8	8612	7
M3 NB J14 to J12	81086	11	82819	10	82167	10
M3 SB J12 to J14	81288	9	85728	9	86348	9
M3 NB J14 to J12	81472	10	79375	10	81508	10
M3 - J12 NB Off Slip	6528	5	5261	2	7984	4
M3 - J12 NB On Slip	6160	6	8540	8	8612	7
Allington Ln Railway Bridge NB	3940	3	5293	3	4257	2
Chestnut Ave EB	11369	3	11187	3	11171	3
Chestnut Ave WB	11064	3	11328	3	11470	3
M3 NB J14 to J12	86483	9	86468	9	87387	9
Woodhouse Lane SB	2315	3	9665	1	12548	3
Woodhouse Lane NB	4050	1	10926	3	12309	2
B3037 River Itchen Crossing EB	7949	3	9430	3	9005	3
A335 Wide Lane NB	7150	12	6954	13	6761	12
A335 Wide Lane SB	10545	3	11617	2	11481	2
A335 Southampton Rd NB	9658	3	10042	3	9789	3
A335 Southampton Rd SB	11800	3	12392	3	12283	3
A335 Wide Lane NB	7351	11	7133	12	6922	12
A335 Wide Lane SB	10176	3	10888	3	10762	3
Chestnut Ave WB	4056	2	4354	2	4466	2
A335 Southampton Rd NB	10333	9	11002	9	10595	9
A335 Southampton Rd NB	9306	3	9674	3	9406	3
A335 Southampton Rd SB	12428	3	13076	3	12976	3
M27 River Itchen Crossing EB	88135	8	88942	8	88653	8
Bishopstoke Rd to Botley Rd Jct EB	2283	6	2725	8	2686	5
Bishopstoke Rd to Botley Rd Jct WB	8837	4	8556	8	9087	3
Allington Ln Railway Bridge SB	2906	2	4320	8	3697	2
B3335 Cox's Hill	1827	3	1822	3	1635	3
Church Lane	895	3	590	3	678	3
Bishopstone Lane	569	3	1413	3	1392	3
Allbrook Way	1646	3	1190	3	1123	3
Longwood Road	1615	3	1977	3	2013	3
Whaddon Lane	1615	3	1977	3	2013	3
Thompson's Lane	1615	3	1977	3	2013	3
Belmore Lane	781	3	833	3	854	3
Belmore Lane	1035	3	1009	3	994	3

Hazeley Road	1082	3	1092	3	1056	3
Winchester Road	704	3	678	3	673	3
Winchester Road	440	3	430	3	430	3
Bourne Lane	1221	3	812	3	756	3
M3 Northbound Junction 11 - 10	4326	3	3954	3	3623	3
M3 Southbound Junction 11 - 10	4326	3	3954	3	3623	3
Badger Farm Road	4342	3	4363	3	4533	3
Hockley Link	4342	3	4363	3	4533	3
St Cross Road	4342	3	4363	3	4533	3
Shawford Road	932	3	1004	3	1030	3
M4 Northbound Junction 12 - 11	14640	3	10992	3	11059	3
M4 Southbound Junction 12 - 11	14640	3	10992	3	11059	3
B3335	2479	3	1309	3	2018	3
B3354	1951	3	2468	3	1920	3
Tees Farm Road	668	3	388	3	300	3
B3335	2324	3	1558	3	2117	3
Church Lane	797	3	523	3	316	3
B3354	1475	3	1573	3	1987	3
Fir Tree Lane	1640	3	3762	3	2360	3
Burnett's Lane	1640	3	3762	3	2360	3
Alma Lane	859	3	1092	3	1159	3
Durley Hall Lane	424	3	559	3	564	3
Scivier's Lane	424	3	559	3	564	3
Winter's Lane	424	3	559	3	564	3
B2177	3524	3	4466	3	3990	3
Lower Lane	3524	3	4466	3	3990	3
B3035	2303	3	2324	3	2282	3
B3354	2277	3	1873	3	1868	3
B2177	3333	3	3783	3	4331	3
B3035	797	3	3022	3	3700	3
Sandy Lane	1066	3	1697	3	1351	3
B3354	797	3	828	3	787	3
Allington Lane	3597	3	4223	3	2826	3
B3354	3597	3	4223	3	2826	3
B3037	1258	3	1842	3	2572	3