諞 TFT

Daylight and Sunlight Report

47a, 47 & 49 Lower Mortlake Road London TW9 2LW

in TFT

Title Daylight/Sunlight Report Address 47a, 47 & 49 Lower Mortlake Road Richmond, TW9 2LW Client Westlake Property Limited February 2022 Date of Report Prepared by **Tuffin Ferraby Taylor** 18 Holborn London EC1N 2LE 44 (0) 20 3479 7787 www.tftconsultants.com



Report Preface



| Issue/Revision | 00 | Date of issue | February 2022 |
|-------------------|-----------------------------|---------------|---------------|
| | | | |
| | | | |
| Report Production | Richard Nosworthy BSc (Hons | 5) | |



Contents

| 1.0 | Introduction | 1 |
|------|-----------------------------------|---|
| 2.0 | Planning Policy and Guidance | 1 |
| 3.0 | Daylight and Sunlight Methodology | 2 |
| 4.0 | Source Information | 3 |
| 5.0 | Assumptions | 4 |
| 6.0 | Development Site | 4 |
| 7.0 | Proposed Scheme | 5 |
| 8.0 | Scope of Assessment | 6 |
| 9.0 | Assessment Results | 6 |
| 10.0 | Conclusions | 9 |

Appendices

Appendix A: 'Existing' and 'Proposed' Plan and 3D Spot Height Drawings Appendix B: Daylight and Sunlight Results to Neighbouring Properties Appendix C: BRE 'SHOG' Overshadowing Drawing and Table Appendix D: Daylight within the Proposed Development



1.0 Introduction

TFT Consultants have been appointed by Westlake Property Limited ("the Applicant") to undertake a full technical review of the potential daylight and sunlight implications that may arise as a result of the Proposed Development. The Proposed Development is located at 47a, 47 and 49 Lower Mortlake Road, Richmond, TW9 2LW ("the Site") and is described as "Construction of a part 1/2/3 storey building (plus lower ground) to provide 14 co-living units (sui generis) and associated internal amenity space at lower ground floor level, with new lower ground level amenity space to neighbouring buildings, and alongside external communal space at ground and lower ground level ("the Proposed Development")".

The study has been undertaken by constructing a detailed 3D model and using our specialist computer software to simulate the light levels to the neighbouring residential properties.

2.0 Planning Policy and Guidance

The technical assessment has been undertaken in accordance with the methodology outlined in The Building Research Establishment Report *"Site Layout for Daylight and Sunlight 2011"* (BRE 209). The BRE document is the principle guidance when considering daylight, sunlight and overshadowing.

The aim of the guide is to ensure good conditions in the local environment. It is intended for buildings designers and their clients, consultants and planning officials. The advice given is not mandatory, although it gives numerical guidelines, these should be interpreted flexibly as natural lighting is only one of many factors in site layout design. In special circumstances, the developer or planning authority may wish to use different target values.

National Planning Policy Framework: July 2021

The National Planning Policy Framework (NPPF) adopted in July 2021, sets out the Government's planning policies and how these are expected to be applied. It provides a framework that can be used by councils to produce their own distinctive local and neighbourhood plans, which reflect the needs and priorities of their communities.

Section 4 of the NPPF relates to Decision-making setting out the principle to consider when determining applications. Paragraph 38 states that *"Local planning authorities should approach decisions on proposed development in a positive and creative way".*

Paragraph 125 (c) mentions daylight and sunlight stating that local planning authorities "when considering applications for housing, authorities should take a flexible approach in applying policies or guidance relating to daylight and sunlight, where they would otherwise inhibit making efficient use of a site (as long as the resulting scheme would provide acceptable living standards)."

London Borough of Richmond Upon Thames Local Plan: July 2018

The Council's Local Plan will set out policies and guidance for the development of the borough over the next 15 years up to 2033. Policy LP8 Amenity and Living Condition states that *"The Council will ensure the design and layout enables good standards of daylight and sunlight to be achieved in new development and in existing properties affected by new development"*.

Paragraph 4.8.5 relates to daylight, sunlight and solar glare suggesting that "the Council will have regard to the most recent Building Research Establishment guidance".

iiiii TFT

3.0 Daylight and Sunlight Methodology

Daylight to Neighbouring Buildings

When considering the impact on neighbouring buildings, the BRE report recommends that if any new development exceeds an angle of more than 25° from the centre point of the neighbouring window as shown in the diagram below, a more detailed check is needed to find the loss of skylight to the existing building.

25 Degree Angle Drawing



Where a proposed development exceeds the 25° angle, the BRE proposes two main methods for calculating daylight levels to neighbouring residential properties. These are the Vertical Sky Component (VSC), the No Sky Line (NSL) and the Average Daylight Factor (ADF) methods.

Vertical Sky Component (VSC)

The VSC quantifies that amount of skylight available at a reference point on the external face of the window (usually the centre point), it does not account for the size and shape of the room the window serves. The Standard CIE (Commission Internationale de L'Eclairage – International Commission on Illumination) overcast sky is used, and the ratio is expressed as a percentage.

The maximum potential VSC if unobstructed is marginally under 40%. The BRE suggests that if the VSC is less than 27%, and is less than 0.8% its former value, then the neighbouring buildings will experience a noticeable reduction in the amount of skylight they receive.

No Sky Line (NSL)

The NSL calculates the daylight distribution within a room by plotting the NSL. The NSL divides points on working plane (0.85m above FFL) which can or cannot see visible sky.

If following construction of a new development, a room is likely to experience a noticeable reduction if a significant area of the room is beyond the NSL or is less than 0.8 times its former value. It should be noted that consideration will need to be given to the depths of single aspect rooms. If the room is greater than 5m deep, then an adverse infringement may be unavoidable.

Both the VSC and NSL assessment methods have been used to evaluate the effect the proposed development may have on the neighbouring residential properties.



Daylight to Proposed Habitable Rooms

The BRE suggests that the ADF method of assessment should be used to measure the overall amount of daylight within proposed habitable spaces. The calculation considers the VSC value, the size and number of windows serving the space, the overall size of the room and its intended use to give an overall percentage value. BS 8206-2 *Code of practice for daylighting* recommends ADF values of 2% in kitchens, 1.5% in living rooms and 1% in bedrooms.

To calculate the ADF levels the following values have been applied:

- Diffuse glass transmission (T): 0.68 for clear double glazing;
- Maintenance factor for dirt on glass (M): 8% loss for vertical glazing;
- Window Aperture Area (Aw): 0.8% for frame correction factor;
- Area-weighted surface reflectance (R): Ceilings: 0.85, Walls: 0.81, Floors: 0.4.

Sunlight

When considering the impact on the amount of sunlight to neighbouring buildings, the BRE report recommends that all main living rooms should be considered if they have a window facing within 90⁰ of due south. Direct sunlight to kitchens and bedrooms is considered less important. To calculate this the BRE has produced sunlight templates for London, Manchester and Edinburgh establishing the Annual Probable Sunlight Hours (APSH) unobstructed light for these areas.

For this assessment, we have used the London template where the maximum APSH is 1,486 hours.

If following the construction of a new development, a living room window facing within 90⁰ due south will experience a noticeable reduction in direct sunlight if:

- Receives less than 20% of annual probable sunlight hours, or less than 5% of annual probable sunlight hours between 21 September and 21 March, and receives less than 0.8 times its former sunlight hours during either period,
- And has a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.

Only the ground floors of 2 and 3 Blue Anchor Alley have been considered for the sunlight assessment, all other properties do not have any living rooms that will have an aspect of the Site and facing within 90⁰ due south.

The BRE states that the guidelines suggested should not be applied rigidly and the numerical values quoted are purely advisory. It is therefore appropriate to consider different values depending on the development type.

4.0 Source Information

The assessment has been undertaken using the following information:

- Existing and Surrounding Buildings: Lever Turner Cowdell: 170-0118-06 Topographical Survey, 170-0118-02A 03 04 05 Existing GA;
- Proposed Development: boehm lynas Architects drawings:
 - o BL_P_Redline_000 Red line 3d model
 - o BL-01-001 Location Plan_P1
 - o BL-16-099 Lower Ground Floor Plan_P1
 - BL-15-100 Ground Floor Plan_P1
 - o BL-15-101 First Floor Plan_P1
 - o BL-15-102 Second Floor Plan_P1
 - o BL-15-301 Elevations_P1
 - o 016_BL_Model_Central



- 45 Lower Mortlake Road: survey plans;
- 4 Blue Anchor Alley: plans obtained from planning portal;

5.0 Assumptions

Access has not been gained to any of the relevant neighbouring buildings to confirm the internal room arrangements. Where floor plans have been unavailable, notional internal room layouts of 4m have been used, unless the building outline dictates otherwise.

Room uses and floor levels have been based on external inspection.

These same assumptions were used in preceding planning application and there were no comments to suggest that these assumptions were inaccurate or incorrect.

6.0 Development Site

The Site is situated in a predominately residential location to the north of Lower Mortlake Road, with Blue Anchor Alley running along the western boundary. The properties comprise in the existing Site condition as follows:

No.47a

Vacant yard formerly used as car parking, a car wash and a yard to store Christmas trees.

No.47

Some existing ground floor circulation space within HMO (which is being reconfigured to connect to new lower ground floor amenity space).

No.49

Some existing ground floor circulation space within HMO (which is being reconfigured to connect to new lower ground floor amenity space).



The existing condition is shown in the image below, which can be found in Appendix A.

Existing Buildings:



7.0 Proposed Development

The proposed scheme by boehm lynas Architects will consist of construction of a part 1/2/3 storey building (plus lower ground) to provide 14 co-living units (sui generis) and associated internal amenity space at lower ground floor level, with new lower ground level amenity space to neighbouring buildings, and alongside external communal space at ground and lower ground level.

The proposed condition is shown in the image below, which can be found in Appendix A.



boehm lynas Architects Scheme: January 2022



8.0 Scope of Assessment

The properties considered for assessment are shown on drawings, which can be found in Appendix A. Based on the extent of the proposed massing the following properties have been assessed against the relevant daylight and sunlight assessment criteria.

- 43 Lower Mortlake Road
- 45 Lower Mortlake Road
- 2 8 Blue Anchor Alley
- New House, Blue Anchor Alley

- 47 Lower Mortlake Road (established upper floors of the site)
- 49 Lower Mortlake Road (established upper floors of the site)

All other properties are either commercial or are situated too far away to experience an adverse impact because of the proposed development.

iiiii TFT

9.0 Assessment Results

Daylight

The full VSC and NSL detailed results for the boehm lynas Architects December 2021 massing can be found listed per property in the Daylight and Sunlight Summary table in Appendix C.

43 Lower Mortlake Street

This is the three-storey mid-terrace property situated to the west of Blue Anchor Alley, there are windows in the rear extension that directly face the Site.

The VSC results indicate that 3 of the 5 windows considered for assessment will fully comply with the BRE target values. One on the remaining windows, is one of two windows serving the room, with the second window retaining in excess of the 27% VSC guidance.

The NSL results indicate that 3 of the 4 rooms considered for assessment will fully comply with the BRE target values. The one room which falls marginally short of the suggested BRE benchmark, will maintain an NSL of around 68% indicating that this property will remain well-lit in the proposed condition.

45 Lower Mortlake Street

This is the three-storey end of terrace property situated directly to the west of the Site across Blue Anchor Alley.

The VSC results indicate that 4 of the 6 windows considered will fully comply with the BRE target values. Of the two remaining windows, one is a secondary window to the Living Room, which is served by other windows that fully satisfy the BRE guidelines and the other serves a bedroom. Bedroom is considered *'less important'* in daylight terms as is it primary function is for sleep and is predominantly occupied at night.

The NSL results indicate that all 3 rooms considered will fully satisfy the BRE guideline values by virtue of retaining at least 0.8 of their former value.

New House & 4-8 Blue Anchor Alley

These are the series of two-storey terraced properties situated to the west of the Site across Blue Anchor Alley.

The VSC results indicate that all 18 windows considered for assessment fully comply with the BRE target values.

The NSL results indicate that all 13 rooms considered for assessment fully comply with the BRE target values.







New House



4 Blue Anchor Alley



5 Blue Anchor Alley



8 Blue Anchor Alley



6 Blue Anchor Alley

2 and 3 Blue Anchor Alley

These are the two-storey terraced properties located directly to the north of the Site.

The VSC results indicate that 12 of the 13 windows considered for assessment will fully comply with the BRE target values. The one window that falls below the suggested BRE guideline is one of four windows serving the room which benefits from all three remaining windows that fully satisfy the BRE guidelines.

The NSL results indicate that all 6 rooms considered for assessment fully comply with the BRE target values.

7 Blue Anchor Alley





Daylight/Sunlight Report 47a, 47 & 49 Lower Mortlake Road

2 Blue Anchor Alley





47 and 49 Lower Mortlake Road

The established windows and rooms to the upper floor have been considered as neighbouring property, with the lower ground floor levels considered as part of the Proposed Development.

The VSC results indicate that 7 of the 10 windows considered for assessment will fully comply with the BRE target values. Two of the remaining windows are each one of two windows serving room which benefit from second window that fully satisfy the BRE guidelines. The final window, first floor W3, still retains 17.47% VSC, which should still be considered adequate for a 'less important' bedroom.

Sunlight

2 & 3 Blue Anchor Alley and 45, 47 and 49 Lower Mortlake Road contain windows/rooms that are orientated within 90° of due south, applicable in relation to the BRE's APSH sunlight assessment.

13 of 14 windows considered for the sunlight method of assessment fully comply with the BRE target values when assessed the APSH method. The one remaining window serves a first-floor bedroom window to 47 Mortlake Road, which the BRE consider to be 'less important'. This window still retains 11% APSH and there for should be considered adequate for the room use.

Overshadowing

The BRE 'Sun Hours on Ground' (SHOG) overshadowing assessment calculates the impact the proposed development will have on neighbouring private and public amenity spaces, such as gardens, parks and play areas. The BRE recommends that 50% of any amenity area should be able to receive at least 2 hours of direct sunlight on 21st March (Spring Equinox) or that the space should retain 0.8 of the former sunlit area i.e. no greater than 20% loss. The results from the assessment can be found in the Appendix C of this report.

The redevelopment property is situated to the south, east and west of neighbouring garden areas. As such, due to the location of the development proper in relation to the neighbouring gardens, both the current and proposed buildings' shadow path will fall within the gardens for short periods of the day. The BRE Sun Hours on Ground (SHOG) assessment has been undertaken on 21st March to demonstrate these satisfy the guidelines.

The results of this assessment demonstrate that 10 of the 11 gardens will satisfy the sunlight on ground assessment on 21st March, retaining sunlight to at least 50% of the area for greater than two hours or will retain 0.8 of therefore former value. The remaining garden to 49 Lower Mortlake Road will fall below guidance, however this generally as a result of small change (16%) to low existing level, which then results in a disproportionate percentage change.

The assessment demonstrates that on the whole, the levels of sunlight on the ground to neighbouring gardens tested will not see a noticeable change and therefore the BRE Guidelines should be considered satisfied.

Internal Daylight Adequacy Assessment

The full ADF detailed results are shown on attached drawing 190629/REL02/01 to 03 and in tabular form in the accompanying summary table in Appendix D.

The main habitable rooms at lower ground floor through to second floor have been assessed to show compliance with the BRE target values. The ADF results indicate that 17 of 18 rooms considered will fully comply with the BRE target values, with a bedroom very marginally below at 0.97% ADF, compared to a target of 1% ADF. The remaining rooms should be considered form part of the workspace and therefore the daylight levels should be considered acceptable. Therefore, majority the proposed habitable rooms will benefit from more than adequate levels of light.

10.0 Conclusions

The technical assessment has been undertaken in accordance with the methodology outlined in The Building Research Establishment Report *"Site Layout for Daylight and Sunlight 2011"* (BRE 209). The BRE document is the principle guidance when considering daylight, sunlight and overshadowing.

43 and 45 Lower Mortlake Road, 47 and 49 Lower Mortlake Road (upper floors), 2-8 Blue Anchor Alley and New House, Blue Anchor Alley have been assessed to establish the effect the Proposed Development may have on the neighbouring residential properties in daylight and sunlight terms.

The Vertical Sky Component and No Skyline methods of assessment have been used to evaluate the effect the Proposed Development may have on the neighbouring residential properties in daylight terms. The Annual Probable Sunlight Hours (APSH) assessment has been undertaken in relation to the relevant windows and rooms to the neighbouring properties.

The VSC results indicate that 45 (85%) of the 53 windows considered will fully comply with the BRE target values. The majority of the windows that fall below the suggested BRE benchmark are secondary windows serving rooms that have the benefit from receiving daylight from other windows.

The NSL results indicate that 30 (88%) of the 34 rooms considered will fully comply with the BRE target values. Two of these rooms are bedrooms that are considered less important. The two remaining rooms retain 0.72 and 0.74 of their

former value, retaining daylight to over 50% of the room areas, indicating that the space will remain well-lit in the proposed condition.

When the VSC and NSL methods of assessment are evaluated, with the exception of a few isolated areas, the Proposed Development will only have a negligible effect on the quality and distribution of light the neighbouring properties receive. Therefore, when considering the constraints of developing in an urban location, the development will not be of an excessive scale for the immediate surrounding area in daylight terms and will meet the intentions of the BRE guide in daylight terms.

The Proposed Development will have a negligible effect to the sunlight the relevant neighbouring properties currently receive.

The internal daylight adequacy assessment demonstrates that the majority of the habitable rooms within the Proposed Development will fully comply with the BRE target values.

The results relating to this contextual scheme are fully commensurate with those expected in this location, representative of the neighbouring context and should therefore be considered acceptable.

Overall, the findings indicate that the development is appropriate on the Site in daylight and sunlight terms and will meet the intentions of the BRE guide. Therefore, the boehm lynas Architects Proposed Development massing is in accordance with the aims of the London Borough of Richmond upon Thames planning policy in daylight and sunlight terms.

APPENØICES

APPENDIX A – PLAN AND 3D SPOT HEIGHT DRAWINGS

| DWN BY | CHK BY | DATE | SCALE | REV |
|----------|---------|----------|--------|---------|
| NM | RN | DEC 2021 | NTS | - |
| PROJ No. | REL No. | ADR No. | IS No. | DWG No. |
| 190629 | 2021-01 | - | - | 06 |
| | | | | |
| | 111 | | | |
| - 11 | | | | |
| | | | | |

APPENDIX B – DAYLIGHT AND SUNLIGHT RESULTS TO NEIGHBOURING PROPERTIES

w: www.tftconsultants.com

| Floor Ref. | Room Ref. | Property Type | Room Use | Window Ref. | | VSC | Pr/Ex | Meets BRE Criteria | Window Orientation | Annual | Pr/Ex | Meets BRE Criteria | Winter | Pr/Ex | Meets BRE Criteria | Total Suns per Room Annual | Total Suns per Room Winter | Meets BRE Criteria |
|------------|-----------|---------------|-----------------|-------------|----------|-------|---------|--------------------------|-----------------------|--------|--------|--------------------------|--------|--------|--------------------------|----------------------------------|----------------------------------|-----------------------|
| | | | | | | | 43 Lowe | er Mortlak | e Road | | | | | | | | | |
| | | | | W1 | Existing | 21.32 | 0.60 | NO | 61°N | 0.00 | *North | *North | 0.00 | *North | *North | | | |
| | R1 | Residential | Unknown-Resi | | Proposed | 12.88 | | | | 0.00 | | | 0.00 | | | | | |
| | | | | | | | | | | | | | | | | | | *North |
| | | | | W2 | Existing | 26.04 | 0.66 | NO | 61°N | 2.00 | *North | *North | 0.00 | *North | *North | | | NOTUI |
| Ground | | | | | Proposed | 17.06 | | | | 1.00 | | | 0.00 | | | | | |
| | 50 | Recidential | Linknown Bosi | W3 | Existing | 28.40 | 0.99 | YES | 331°N | 5.00 | *North | *North | 0.00 | *North | *North | | | |
| | R2 | Residential | UTIKITOWIT-RESI | | Proposed | 28.12 | | | | 5.00 | | | 0.00 | | | | | |
| | | | | | | | | | | | | | | | | | | *** |
| | | | | W/1 | Existing | 36.22 | 0.91 | VES | 3/13°N | 1.00 | *North | *North | 0.00 | *North | *North | | | *North |
| | | | | **1 | Proposed | 32.82 | 0.51 | 1125 | 545 N | 1.00 | North | North | 0.00 | North | North | | | |
| First | R1 | Residential | Unknown-Resi | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | *North |
| | | | | W1 | Existing | 38.36 | 0.94 | YES | 343°N | 1.00 | *North | *North | 0.00 | *North | *North | | | |
| Second | R1 | Residential | Unknown-Resi | | Proposed | 36.04 | | | | 1.00 | | | 0.00 | | | | | |
| | | | | | | | | | | | | | | | | | | *North |
| | | | | | | | 45 1 | | Deed | 1 | | | | | | | | North |
| | r | T | r | Т | | | 45 LOW | | e Kudu | T | | | | | | | | |
| | | | | W1 | Existing | 20.65 | 0.14 | NO | 58°N | 3.00 | *North | *North | 0.00 | *North | *North | | | |
| | | | | 14/4 | Proposed | 2.80 | 1.00 | VEC | 220°N | 0.00 | *North | *North | 0.00 | *North | *North | | | |
| | R1 | Residential | Living Room | VV4 | Proposed | 13.15 | 1.00 | TES | 556 N | 0.00 | NOTUT | North | 0.00 | NOTUI | NOILII | | | |
| | | | | | oposed | 10.10 | | | | 0.00 | | | 0.00 | | | | | |
| Ground | | | | | | | | | | | | | | | | | | *North |
| Ground | | | | W2 | Existing | 29.96 | 0.89 | YES | 333°N | 2.00 | *North | *North | 0.00 | *North | *North | | | |
| | | | | 14/2 | Proposed | 26.57 | 1.00 | VEC | 2208 | 2.00 | 1.00 | VEC | 0.00 | 1.00 | VEC | | | |
| | R2 | Residential | Bedroom | VV 3 | Proposed | 21.65 | 1.00 | TES | 239 | 22.00 | 1.00 | TES | 1.00 | 1.00 | TES | | | |
| | | | | | rioposed | 21.05 | | | | 22.00 | | | 1.00 | | | 22.00 | 1.00 | |
| | | | | | | | | | | | | | | | | 22.00 | 1.00 | YES |
| | | | | W1 | Existing | 36.26 | 0.82 | YES | 338°N | 2.00 | *North | *North | 0.00 | *North | *North | | | |
| First | R1 | Residential | Bathroom | | Proposed | 29.66 | | | | 2.00 | | | 0.00 | | | | | |
| | | | | | | | | | | | | | | | | | | *North |
| | | | | W1 | Existing | 36,85 | 0.48 | NO | 58°N | 17.00 | *North | *North | 2.00 | *North | *North | | | NOTUT |
| | | | | | Proposed | 17.78 | 2.10 | | | 13.00 | | | 2.00 | | | | | |
| Second | R1 | Residential | Bedroom | W2 | Existing | 88.14 | 0.93 | YES | 338°N Inc | 4.00 | *North | *North | 0.00 | *North | *North | | | |
| Jecona | N1 | Residential | bearooni | | Proposed | 81.92 | | | | 4.00 | | | 0.00 | | | | | |
| | | | | | | | | | | | | | | | | | | White states |
| | ļ | | ļ | | | | | | | | | | | | | <u> </u> | | ⁺North |

| Floor Ref. | Room Ref. | Property Type | Room Use | Window Ref. | | vsc | Pr/Ex | Meets BRE Criteria | Window Orientation | Annual | Pr/Ex | Meets BRE Criteria | Winter | Pr/Ex | Meets BRE Criteria | Total Suns per Room Annual | Total Suns per Room Winter | Meets BRE Criteria |
|------------|-----------|---------------|--------------|-------------|----------------------|----------------|----------|--------------------------|-----------------------|---------------|----------|--------------------------|--------------|---------|--------------------------|----------------------------------|----------------------------------|-----------------------|
| | | | | | | | 47 Lowe | er Mortlake | e Road | | | ententa | | | ententa | Annual | inite: | |
| | | | | W1 | Existing | 23.52 | 0.97 | YES | 341°N | 4.00 | *North | *North | 0.00 | *North | *North | | | |
| | R1 | Residential | Kitchen-Resi | W2 | Proposed Existing | 22.81 18.39 | 0.51 | NO | 251° | 1.00 12.00 | 0.00 | NO | 0.00 0.00 | 1.00 | YES | | | |
| Crewent | | hesidentia | | | Proposed | 9.42 | | | | 0.00 | | | 0.00 | | | 15.00 | 0.00 | |
| Ground | | | | | | | | | | | | | | | | 1.00 | 0.00 | YES |
| | | | | W3 | Existing Proposed | 16.26 14 42 | 0.89 | YES | 339°N | 0.00 | *North | *North | 0.00 | *North | *North | | | |
| | R2 | Residential | Bedroom | | rioposed | 14.42 | | | | 0.00 | | | 0.00 | | | | | |
| | | | | 14/1 | Eviatian | 21.20 | 1.00 | VEC | 241°N | 2.00 | *N o sta | *Ne uth | 0.00 | *No uth | *N auth | | | *North |
| | | | | VVI | Proposed | 31.30 | 1.00 | TES | 341 N | 2.00 | North | North | 0.00 | North | ·North | | | |
| | R1 | Residential | Bedroom | W2 | Existing | 35.25 | 0.55 | NO | 251° | 39.00 | 0.28 | NO | 10.00 | 0.00 | NO | | | |
| | | | | | Proposed | 19.34 | | | | 11.00 | | | 0.00 | | | 39.00 | 10.00 | |
| First | | | | | | | | | | | | | | | | 11.00 | 0.00 | NO |
| | | | | W3 | Existing | 29.71 | 0.59 | NO | 341°N | 3.00 | *North | *North | 0.00 | *North | *North | | | |
| | R2 | Residential | Bedroom | | Proposed | 17.47 | | | | 0.00 | | | 0.00 | | | | | |
| | | | | | | | | | | | | | | | | | | *North |
| | | | | W1 | Existing Proposed | 39.54 36.30 | 0.92 | YES | 341°N | 0.00 | *North | *North | 0.00 | *North | *North | | | |
| | R1 | Residential | Bedroom | | rioposed | 50.50 | | | | 0.00 | | | 0.00 | | | | | |
| | | | | W/2 | Evicting | 04.21 | 0.82 | VEC | 2E1º Inc | 57.00 | 0.62 | VEC | 12.00 | 0.46 | VEC | | | *North |
| Second | | | | VV2 | Proposed | 69.07 | 0.82 | TE3 | 251 1110 | 36.00 | 0.05 | TES | 6.00 | 0.46 | TES | | | |
| | R2 | Residential | Bedroom | W3 | Existing | 39.42 | 1.00 | YES | 161° | 55.00 | 1.00 | YES | 23.00 | 1.00 | YES | | | |
| | | | | | Proposed | 39.42 | | | | 55.00 | | | 23.00 | | | 88.00 | 30.00 | |
| | | | | | | | | | | | | | | | | 67.00 | 23.00 | YES |
| | | | | | | | 49 Lowe | er Mortlake | e Road | | | | | | | | | |
| | | | | W1 | Existing | 15.90 | 0.83 | YES | 251° | 24.00 | 0.88 | YES | 3.00 | 0.00 | YES | | | |
| Ground | R1 | Residential | Studio-Apt | | Proposed | 13.19 | | | | 21.00 | | | 0.00 | | | 24.00 | 3.00 | |
| | | | | | | | | | | | | | | | | 21.00 | 0.00 | YES |
| | | | | | | Th | e New Ho | use Blue Ai | nchor Alley | | | | | | | | | |
| | | | | W2 | Existing | 30.85 | 0.93 | YES | 58°N | 18.00 | *North | *North | 1.00 | *North | *North | | | |
| Ground | R2 | Residential | Living Room | | Proposed | 28.75 | | | | 14.00 | | | 0.00 | | | | | |
| | | | | | | | | | | | | | | | | | | *North |

| Floor Ref. | Room Ref. | Property Type | Room Use | Window Ref. | | vsc | Pr/Ex | Meets BRE Criteria | Window Orientation | Annual | Pr/Ex | Meets BRE Criteria | Winter | Pr/Ex | Meets BRE Criteria | Total Suns per Room Annual | Total Suns per Room Winter | Meets BRE Criteria |
|------------|------------|---------------|-------------|-------------|----------------------|-------|-------------|--------------------------|-----------------------|--------|--------|--------------------------|---------------|--------|--------------------------|----------------------------------|----------------------------------|-----------------------|
| | | | | W1 | Existing | 30.38 | 0.96 | YES | 149° | 41.00 | 0.95 | YES | 18.00 | 0.94 | YES | | | |
| | | | | | Proposed | 29.10 | | | | 39.00 | | | 17.00 | | | | | |
| | R1 | Residential | Bedroom | W2 | Existing | 35.78 | 0.95 | YES | 58°N | 18.00 | *North | *North | 2.00 | *North | *North | | | |
| | | | | | Proposed | 34.09 | | | | 14.00 | | | 0.00 | | | 51.00 | 19.00 | |
| First | | | | | | | | | | | | | | | | 48.00 | 17.00 | YES |
| | | | | W3 | Existing | 35.29 | 0.97 | YES | 58°N | 18.00 | *North | *North | 1.00 | *North | *North | | | - |
| | R2 | Residential | Bedroom | | Proposed | 34.24 | | | | 16.00 | | | 0.00 | | | | | |
| | | | | | | | | | | | | | | | | | | *** |
| | l | | l | 1 | | | | | | | | | | | | | | *North |
| | | | | | | | 2 Blu | e Anchor A | lley | | | | | | | | | |
| | | | | W1 | Existing | 24.19 | 1.00 | YES | 282°N | 33.00 | *North | *North | 8.00 | *North | *North | | | |
| | | | | 14/2 | Proposed | 24.19 | 0.00 | VEC | 2270 | 33.00 | 0.00 | VEC | 8.00 | 0.00 | VEC | | | |
| | | | | W2 | Existing | 30.79 | 0.99 | YES | 237 | 54.00 | 0.96 | YES | 20.00 | 0.90 | YES | | | |
| | R1 | Residential | Living Room | W3 | Existing | 27.48 | 0.96 | YES | 192° | 55.00 | 0.98 | YES | 18.00 | 0.94 | YES | | | |
| | | | | | Proposed | 26.28 | | | | 54.00 | | | 17.00 | | - | | | |
| | | | | | | | | | | | | | | | | 58.00 | 20.00 | |
| Ground | | | | | | | | | | | | | | | | 56.00 | 18.00 | YES |
| | | | | W5 | Existing | 27.32 | 1.00 | YES | 282°N | 34.00 | *North | *North | 7.00 | *North | *North | | | |
| | | | | W6 | Existing | 31.30 | 0.97 | YES | 237° | 51.00 | 0.90 | YES | 16.00 | 0.69 | YES | | | |
| | D 2 | Desidential | | | Proposed | 30.43 | | | | 46.00 | | | 11.00 | | | | | |
| | К3 | Residential | Living Room | W7 | Existing | 25.45 | 0.90 | YES | 192° | 52.00 | 0.90 | YES | 15.00 | 0.67 | YES | | | |
| | | | | | Proposed | 22.97 | | | | 47.00 | | | 10.00 | | | | | |
| | | | | | | | | | | | | | | | | 54.00 49.00 | 16.00 11.00 | VES |
| | | | | W1 | Existing | 36.84 | 1.00 | YES | 237° | 50.00 | 1.00 | YES | 15.00 | 1.00 | YES | 45.00 | 11.00 | 125 |
| | P1 | Residential | Bedroom | | Proposed | 36.67 | | | | 50.00 | | | 15.00 | | | | | |
| | N1 | Residential | beuroom | | | | | | | | | | | | | 50.00 | 15.00 | |
| First | | | | 14/2 | Evicting | 26.02 | 0.00 | VEC | 2270 | 50.00 | 1.00 | VEC | 15.00 | 1.00 | VEC | 50.00 | 15.00 | YES |
| | | | | VV Z | Proposed | 36.92 | 0.99 | TES | 237 | 50.00 | 1.00 | TES | 15.00 | 1.00 | TES | | | |
| | R2 | Residential | Bedroom | | roposed | 56.55 | | | | 50.00 | | | 10.00 | | | 50.00 | 15.00 | |
| | | | | | | | | | | | | | | | | 50.00 | 15.00 | YES |
| | | | | | | | 3 Blu | e Anchor A | lley | | | | | | | | | |
| | | | | W1 | Existing | 25.80 | 1.00 | YES | 285°N | 34.00 | *North | *North | 6.00 | *North | *North | | | |
| | | | | | Proposed | 25.75 | | | | 33.00 | | | 5.00 | | | | | |
| | | | | W2 | Existing | 30.03 | 0.94 | YES | 240° | 51.00 | 0.82 | YES | 14.00 | 0.43 | YES | | | |
| | | | | W/3 | Proposed Existing | 28.28 | <u>0 91</u> | VEC | 105° | 42.00 | 0 00 | VEC | 6.00 10.00 | 0.50 | VEC | | | |
| Ground | R1 | Residential | Living Room | vv5 | Proposed | 18.34 | 0.01 | 115 | 155 | 43.00 | 0.50 | 115 | 5.00 | 0.50 | 115 | | | |
| | | | | W4 | Existing | 32.55 | 0.78 | NO | 237° | 19.00 | 0.68 | NO | 9.00 | 0.33 | NO | | | |
| | | | | | Proposed | 25.42 | | | | 13.00 | | | 3.00 | | | | | |

| Floor Ref. | Room Ref. | Property Type | Room Use | Window Ref. | | VSC | Pr/Ex | Meets BRE Criteria | Window Orientation | Annual | Pr/Ex | Meets BRE Criteria | Winter | Pr/Ex | Meets BRE Criteria | Total Suns per Room Annual | Total Suns per Room Winter | Meets BRE Criteria |
|------------|-----------|---------------|-------------|-------------|----------|-------|-------|--------------------------|-----------------------|--------|--------|--------------------------|--------|--------|--------------------------|----------------------------------|----------------------------------|-----------------------|
| | | | | | | | | | | | | | | | | 58.00 | 18.00 | |
| | | | | W1 | Existing | 36.92 | 0.99 | YES | 240° | 48.00 | 1.00 | YES | 13.00 | 1 00 | YES | 46.00 | 7.00 | YES |
| First | 54 | Desidential | Deducers | | Proposed | 36.42 | 0.55 | 125 | 240 | 48.00 | 1.00 | 125 | 13.00 | 1.00 | 125 | | | |
| First | KI | Residential | Bedroom | | | | | | | | | | | | | 48.00 | 13.00 | |
| | | | | ļ | | | | | | ļ | | | | | | 48.00 | 13.00 | YES |
| | | | | | | | 4 Blu | ie Anchor A | Alley | | | | | | | | | |
| | | | | W1 | Existing | 31.17 | 0.96 | YES | 58°N | 12.00 | *North | *North | 0.00 | *North | *North | | | |
| | | | | | Proposed | 29.79 | | | | 11.00 | | | 0.00 | | | | | |
| Ground | R1 | Residential | Living Room | W2 | Existing | 30.66 | 0.97 | YES | 57°N | 17.00 | *North | *North | 2.00 | *North | *North | | | |
| | | | | | Proposed | 29.66 | | | | 14.00 | | | 0.00 | | | | | |
| | | | | | | | | | | | | | | | | | | *North |
| | | | | W1 | Existing | 35.37 | 0.98 | YES | 58°N | 14.00 | *North | *North | 0.00 | *North | *North | | | |
| First | R1 | Residential | Bedroom | | Proposed | 34.79 | | | | 14.00 | | | 0.00 | | | | | |
| Thise | ni | nesidentia | bearbonn | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | *North |
| | | | | | | | 5 Blu | e Anchor A | Alley | | | | | | | | | |
| | | | | W1 | Existing | 30.29 | 0.98 | YES | 59°N | 17.00 | *North | *North | 1.00 | *North | *North | | | |
| | | | | | Proposed | 29.65 | | | | 16.00 | | | 0.00 | | | | | |
| Ground | R1 | Residential | Living Room | W2 | Existing | 30.99 | 0.99 | YES | 58°N | 3.00 | *North | *North | 0.00 | *North | *North | | | |
| | | | | | Proposed | 30.55 | | | | 3.00 | | | 0.00 | | | | | |
| | | | | | | | | | | | | | | | | | | *North |
| | | | | W1 | Existing | 35.25 | 0.99 | YES | 58°N | 14.00 | *North | *North | 0.00 | *North | *North | | | |
| First | R1 | Residential | Living Room | | Proposed | 34.90 | | | | 14.00 | | | 0.00 | | | | | |
| | | | | | | | | | | | | | | | | | | *No utile |
| | | | | | | | | | | | | | | | | | | ·North |
| | | 1 | | | | | 6 Blu | e Anchor A | alley | | | | | | | | | |
| | | | | W1 | Existing | 25.21 | 1.00 | YES | 57°N | 8.00 | *North | *North | 0.00 | *North | *North | | | |
| | | | | 14/2 | Proposed | 25.21 | 1.00 | VEC | EQON | 8.00 | *North | *North | 0.00 | *North | *North | | | |
| Ground | R1 | Residential | Living Room | VV Z | Pronosed | 26.00 | 1.00 | TES | 30 N | 6.00 | NOTUT | NOTUT | 0.00 | NOTUT | NOTUT | | | |
| | | | | | Troposed | 20.57 | | | | 0.00 | | | 0.00 | | | | | |
| | | | | | | | | | | | | | | | | | | *North |
| | | | | W1 | Existing | 32.60 | 1.00 | YES | 57°N | 15.00 | *North | *North | 0.00 | *North | *North | | | |
| First | R1 | Residential | Bedroom | | Proposed | 32.60 | | | | 15.00 | | | 0.00 | | | | | |
| | | | | | | | | | | | | | | | | | | *North |

| Floor Ref. | Room Ref. | Property Type | Room Use | Window Ref. | | VSC | Pr/Ex | Meets BRE Criteria | Window Orientation | Annual | Pr/Ex | Meets BRE Criteria | Winter | Pr/Ex | Meets BRE Criteria | Total Suns per Room Annual | Total Suns per Room Winter | Meets BRE Criteria |
|------------|-----------|---------------|--------------|-------------|--|----------------------------------|--------------|--------------------------|-----------------------|--|----------------|--------------------------|--|----------------|--------------------------|----------------------------------|----------------------------------|-----------------------|
| | | | | | | | 7 Blu | e Anchor A | lley | | | | | | | | | |
| Ground | R1 | Residential | Living Room | W1 | Existing Proposed | 19.45 19.24 | 0.99 | YES | 58°N | 6.00 6.00 | *North | *North | 0.00 0.00 | *North | *North | | | *** |
| First | R1 | Residential | Bedroom | W2 | Existing Proposed | 27.27 27.13 | 0.99 | YES | 57°N | 13.00 13.00 | *North | *North | 0.00 0.00 | *North | *North | | | *North |
| | | | | 1 | | | 8 Blu | e Anchor A | lley | | | | | | | | | North |
| | R1 | Residential | Unknown-Resi | W1 | Existing Proposed | 33.97 33.54 | 0.99 | YES | 148° | 56.00 56.00 | 1.00 | YES | 19.00 19.00 | 1.00 | YES | 56.00 56.00 | 19.00 19.00 | YES |
| First | R2 | Residential | Unknown-Resi | W2 W3 | Existing Proposed Existing Proposed | 35.11 34.65 36.83 36.76 | 0.99 1.00 | YES YES | 148° 58°N | 59.00 59.00 22.00 22.00 | 1.00 *North | YES *North | 22.00 22.00 4.00 4.00 | 1.00 *North | YES *North | 64.00 64.00 | 23.00 23.00 | YES |

Project Name: LOWER MORTLAKE ROAD Project No.: 190629-REL01 Report Title: No Sky Line (NSL) Analysis to Neighbouring Rooms Date of Analysis: 16/12/2021

| Floor Ref. | Room Ref | Property Type | Room Use | | Room Area | Lit Area Existing | Lit Area Proposed | Pr/Ex | Meets BRE Criteria |
|------------|----------|----------------|-----------------|-----------------------|--------------|----------------------|----------------------|-------|--------------------------|
| | | | 43 Lower Mo | rtlake Road | | | | | |
| Ground | R1 | Residential | Unknown-Resi | Area m2 | 3.26 | 3.06 | 2.20 | | |
| | | | | % of room | | 93.77% | 67.44% | 0.72 | NO |
| Ground | R2 | Residential | Unknown-Resi | Area m2 | 5.84 | 5.70 | 5.70 | | |
| | 54 | Dest de set al | | % of room | 15.00 | 97.48% | 97.48% | 1.00 | YES |
| First | R1 | Residential | Unknown-Resi | Area m2 | 15.68 | 14.69 | 14.37 | 0.09 | VEC |
| Second | R1 | Residential | Linknown-Resi | % 01 100Π1 Δrea m2 | 15.68 | 12.80 | 91.03% 12.55 | 0.98 | TES |
| Second | N1 | Residential | Onknown-nesi | % of room | 15.00 | 82.18% | 80.01% | 0.97 | YES |
| | | | 45 Lower Mo | rtlake Poad | | 02110/10 | 00101/0 | 0107 | . 20 |
| | | | | | | | | | |
| Ground | R1 | Residential | Living Room | Area m2 | 11.99 | 4.43 | 4.43 | | |
| Cround | 50 | Decidential | Dedreem | % of room | 0.22 | 36.93% | 36.93% | 1.00 | YES |
| Ground | R2 | Residential | Bedroom | Area mz | 8.33 | 8.29 | 8.29 | 1.00 | VEC |
| First | R1 | Residential | Bathroom | 2 Δrea m2 | 2 94 | 2 82 | 2.82 | 1.00 | TES |
| THSC | NI | Residential | Bathroom | % of room | 2.54 | 95.99% | 95.99% | 1.00 | YES |
| Second | R1 | Residential | Bedroom | Area m2 | 12.23 | 12.18 | 11.91 | | |
| | | | | % of room | | 99.59% | 97.39% | 0.98 | YES |
| | | | 47 Lower Mo | rtlake Road | | | | | |
| Ground | R1 | Residential | Kitchen-Resi | Area m2 | 17.66 | 12.85 | 9.54 | | |
| | | | | % of room | | 72.76% | 54.05% | 0.74 | NO |
| Ground | R2 | Residential | Bedroom | Area m2 | 10.86 | 5.83 | 5.78 | | |
| | | | | % of room | | 53.69% | 53.23% | 0.99 | YES |
| First | R1 | Residential | Bedroom | Area m2 | 12.93 | 12.45 | 12.07 | | |
| | | | | % of room | | 96.25% | 93.34% | 0.97 | YES |
| First | R2 | Residential | Bedroom | Area m2 | 14.54 | 13.96 | 9.08 | | |
| Second | D1 | Posidontial | Padroom | % of room | 9.62 | 96.05% | 62.46% | 0.65 | NO |
| Second | ΚI | Residential | Beuroom | % of room | 0.05 | 72 25% | 72 25% | 1 00 | VES |
| Second | R2 | Residential | Bedroom | Area m2 | 13.86 | 13.86 | 13.86 | 1.00 | 125 |
| | | | | % of room | | 100.00% | 100.00% | 1.00 | YES |
| | | | 49 Lower Mo | rtlake Road | | | | | |
| Ground | R1 | Residential | Studio-Apt | Area m2 | 16.55 | 9.29 | 6.09 | | |
| | | | | % of room | | 56.13% | 36.82% | 0.66 | NO |
| | | ٦ | he New House Bl | ue Anchor Alle | y | | | | |
| Ground | R3 | Residential | Living Room | Area m2 | 1/1.37 | 12.36 | 12.36 | | |
| Ground | RZ | Residential | LIVING ROOM | % of room | 14.57 | 85 97% | 85.96% | 1 00 | YES |
| First | R1 | Residential | Bedroom | Area m2 | 10.31 | 10.28 | 10.28 | 1.00 | 125 |
| | | | | % of room | | 99.65% | 99.65% | 1.00 | YES |
| First | R2 | Residential | Bedroom | Area m2 | 10.31 | 10.21 | 10.21 | | |
| | | | | % of room | | 99.04% | 99.04% | 1.00 | YES |
| | | | 2 Blue Ancl | hor Alley | | | | | |
| Ground | R1 | Residential | Living Room | Area m2 | 11.31 | 11.22 | 11.22 | | |
| | | | 0 | % of room | | 99.22% | 99.22% | 1.00 | YES |
| Ground | R3 | Residential | Living Room | Area m2 | 11.88 | 11.77 | 11.77 | | |
| | | | | % of room | | 99.11% | 99.09% | 1.00 | YES |
| First | R1 | Residential | Bedroom | Area m2 | 13.77 | 13.35 | 13.34 | | |
| _ | | | | % of room | | 96.90% | 96.90% | 1.00 | YES |
| First | R2 | Residential | Bedroom | Area m2 | 13.91 | 13.41 | 13.41 | 1.00 | VEC |
| | | | | % OT FOOM | L | 90.43% | 90.41% | 1.00 | TES |
| | | | 3 Blue Ancl | hor Alley | | | | | |
| Ground | R1 | Residential | Living Room | Area m2 | 17.23 | 16.72 | 16.71 | | |
| | | | | % of room | | 97.02% | 97.01% | 1.00 | YES |
| First | R1 | Residential | Bedroom | Area m2 | 16.87 | 16.09 | 16.09 | | |
| | | | | % of room | | 95.43% | 95.43% | 1.00 | YES |

Project Name: LOWER MORTLAKE ROAD Project No.: 190629-REL01 Report Title: No Sky Line (NSL) Analysis to Neighbouring Rooms Date of Analysis: 16/12/2021

| Floor Ref. | Room Ref | Property Type | Room Use | | Room Area | Lit Area Existing | Lit Area Proposed | Pr/Ex | Meets BRE Criteria |
|------------|----------|---------------|--------------|----------------------|--------------|----------------------|----------------------|-------|--------------------------|
| | | | 4 Blue Anc | hor Alley | | | | | |
| Ground | R1 | Residential | Living Room | Area m2 % of room | 11.12 | 11.04 99.26% | 11.04 99.26% | 1.00 | YES |
| First | R1 | Residential | Bedroom | Area m2 % of room | 11.12 | 10.44 93.87% | 10.44 93.85% | 1.00 | YES |
| | | | 5 Blue Anc | hor Alley | | | | | |
| Ground | R1 | Residential | Living Room | Area m2 % of room | 11.12 | 10.87 97.78% | 10.87 97.77% | 1.00 | YES |
| First | R1 | Residential | Living Room | Area m2 % of room | 11.12 | 10.48 94.20% | 10.47 94.18% | 1.00 | YES |
| | | | 6 Blue Anc | hor Alley | | | | | |
| Ground | R1 | Residential | Living Room | Area m2 % of room | 14.33 | 13.74 95.89% | 13.74 95.89% | 1.00 | YES |
| First | R1 | Residential | Bedroom | Area m2 % of room | 14.33 | 13.84 96.62% | 13.84 96.62% | 1.00 | YES |
| | | | 7 Blue Anc | hor Alley | | | | | |
| Ground | R1 | Residential | Living Room | Area m2 % of room | 7.91 | 4.77 60.33% | 4.77 60.33% | 1.00 | YES |
| First | R1 | Residential | Bedroom | Area m2 % of room | 7.91 | 7.77 98.31% | 7.77 98.31% | 1.00 | YES |
| | | | 8 Blue Anc | hor Alley | | | | | |
| First | R1 | Residential | Unknown-Resi | Area m2 % of room | 12.85 | 12.55 97.66% | 12.55 97.66% | 1.00 | YES |
| First | R2 | Residential | Unknown-Resi | Area m2 % of room | 10.20 | 10.18 99.73% | 10.18 99.73% | 1.00 | YES |

APPENDIX C – BRE 'SHOG' OVERSHADOWING DRAWING AND TABLE

Project Name: LOWER MORTLAKE ROAD Project No.: 190629-REL01 Report Title: Two Hour Sun on Ground Analysis to Neighbouring Amenities - 21st March Date of Analysis: 16/12/2021

| Floor Ref | Amenity Ref | | Amenity Area | Lit Area Existing | Lit Area Proposed | Pr/Ex | Meets BRE Criteria |
|-----------|-------------|-----------------------|-----------------|---------------------------|---------------------------|-------|-----------------------|
| | | 43 Low | ver Mortlal | ke Road | | | |
| Ground | A1 | Area m2 Percentage | 23.94 | 21.66 90% | 21.66 <mark>90%</mark> | 1.00 | YES |
| | | 45 Low | ver Mortlal | ke Road | | | |
| Ground | A1 | Area m2 Percentage | 21.55 | 12.92 60% | 11.73 54% | 0.91 | YES |
| | | 49 Low | ver Mortlal | ke Road | | | |
| Ground | A1 | Area m2 Percentage | 36.21 | 9.84 27% | 3.85 11% | 0.39 | NO |
| | | The New Ho | ouse Blue / | Anchor All | еу | | |
| Ground | A1 | Area m2 Percentage | 27.95 | 23.55 <mark>84%</mark> | 20.22 <mark>72%</mark> | 0.86 | YES |
| | | 1 Bli | ue Anchor | Alley | | | |
| Ground | A1 | Area m2 Percentage | 46.64 | 45.95 99% | 45.95 <mark>99%</mark> | 1.00 | YES |
| | | 2 Blu | ue Anchor | Alley | | | |
| Ground | A1 | Area m2 Percentage | 46.01 | 45.12 98% | 45.13 98% | 1.00 | YES |
| | | 3 Blu | ue Anchor | Alley | | | |
| Ground | A1 | Area m2 Percentage | 20.60 | 5.10 25% | 5.81 28% | 1.14 | YES |
| | | 4 Blu | ue Anchor | Alley | | | |
| Ground | A1 | Area m2 Percentage | 11.01 | 9.41 86% | 6.81 <mark>62%</mark> | 0.72 | YES |
| | | 5 Bli | ue Anchor | Alley | | | |
| Ground | A1 | Area m2 Percentage | 10.83 | 7.95 73% | 7.81 <mark>72%</mark> | 0.98 | YES |
| | | 6 Blu | ue Anchor | Alley | | | |
| Ground | A1 | Area m2 Percentage | 15.30 | 9.39 61% | 9.39 <mark>61%</mark> | 1.00 | YES |
| | | 7 Blu | ue Anchor | Alley | | | |
| Ground | A1 | Area m2 Percentage | 10.02 | 7.10 71% | 7.10 71% | 1.00 | YES |

APPENDIX D – DAYLIGHT WITHIN THE PROPOSED DEVELOPMENT

Project Name: LOWER MORTLAKE ROAD Project No.: 190629-REL02 Report Title: Average Daylight Factor (ADF) Analysis to Proposed Rooms Date: 16/12/2021

| 47 Lower Mortlake Road - Proposed Lower Ground R3 Residential Living Room W2-L 0.68 0.92 0.71 21.17 65.43 0.65 0.15 0 Living Room W2-U 0.68 0.92 1.31 23.36 65.43 0.65 1.00 0 Living Room W3-L 0.68 0.92 0.71 34.26 65.43 0.65 0.15 0 Living Room W3-L 0.68 0.92 1.31 39.20 65.43 0.65 1.00 0 Living Room W3-U 0.68 0.92 1.31 39.20 65.43 0.65 0.15 0 Living Room W4-U 0.68 0.92 0.71 27.82 26.52 0.65 0.15 0 Lower Ground R4 Residential Study W1-L 0.68 0.92 1.31 31.25 26.52 0.65 1.00 1 Ta Lower Mortlake Road - Proposed <th>0.04 0.51 0.06 0.85</th> | 0.04 0.51 0.06 0.85 |
|--|------------------------------|
| Lower Ground R3 Residential Living Room W2-L 0.68 0.92 0.71 21.17 65.43 0.65 0.15 C Living Room W2-U 0.68 0.92 1.31 23.36 65.43 0.65 0.15 C Living Room W3-L 0.68 0.92 0.71 34.26 65.43 0.65 0.15 O Living Room W3-U 0.68 0.92 1.31 39.20 65.43 0.65 0.15 O O Living Room W3-U 0.68 0.92 0.71 29.80 65.43 0.65 0.15 O Living Room W4-U 0.68 0.92 0.71 29.80 65.43 0.65 0.15 O Lower Ground R4 Residential Study W1-L 0.68 0.92 0.71 27.82 26.52 0.65 0.15 O Lower Ground R4 Residential Study W1-U 0.68 | 0.04 0.51 0.06 0.85 |
| Living Room W2-U 0.68 0.92 1.31 23.36 65.43 0.65 1.00 C Living Room W3-L 0.68 0.92 0.71 34.26 65.43 0.65 0.15 C Living Room W3-U 0.68 0.92 1.31 39.20 65.43 0.65 1.00 0 Living Room W4-L 0.68 0.92 0.71 29.80 65.43 0.65 0.15 0 Living Room W4-U 0.68 0.92 1.31 34.76 65.43 0.65 1.00 0 VI-U 0.68 0.92 1.31 34.76 65.43 0.65 1.00 0 VI-U 0.68 0.92 1.31 31.25 26.52 0.65 0.15 0 Study W1-U 0.68 0.92 1.31 31.25 26.52 0.65 1.00 1 VI-U 0.68 0.92 1.31 31.25 26.52 0.65 1.00 1 VI-U 1 VI-U 0.68 0.92 1.31 31.25 26.52 0.65 1.00 1 VI-U 0.68 0.92 1.31 31.25 0.65 0.15 0 VI-U 0.68 0.92 1.023 1.23 0.65 0.15 0 VI-U 0.68 0.92 1.023 1.23 0.65 1.00 2 VI-U 0.68 0.92 1.023 1.23 0.25 1.00 2 VI-U 0.20 1.23 0.23 0.25 1.00 2 VI-U 0.20 1.23 0.23 0.25 1.20 0.25 1.20 0 VI-U 0.20 1.23 0.23 0.25 1. | 0.51).06).85 |
| Living Room W3-L 0.68 0.92 0.71 34.26 65.43 0.65 0.15 C Living Room W3-U 0.68 0.92 1.31 39.20 65.43 0.65 1.00 C Living Room W4-L 0.68 0.92 0.71 29.80 65.43 0.65 0.15 C Living Room W4-L 0.68 0.92 0.71 29.80 65.43 0.65 0.15 C Lower Ground R4 Residential Study W1-L 0.68 0.92 0.71 27.82 26.52 0.65 0.15 O Lower Ground R4 Residential Study W1-U 0.68 0.92 0.71 27.82 26.52 0.65 0.15 O 1 Lower Ground R4 Residential Study W1-U 0.68 0.92 1.31 31.25 26.52 0.65 1.00 1 Lower Ground R1 Residential LKD W1-L 0.68 0.92 4.34 39.49 181.28 0.65 <td>D.06 D.85</td> | D.06 D.85 |
| Living Room W3-U 0.68 0.92 1.31 39.20 65.43 0.65 1.00 0 Living Room W4-L 0.68 0.92 0.71 29.80 65.43 0.65 0.15 0 Living Room W4-U 0.68 0.92 1.31 34.76 65.43 0.65 1.00 0 Lower Ground R4 Residential Study W1-L 0.68 0.92 0.71 27.82 26.52 0.65 0.15 0 Lower Ground R4 Residential Study W1-U 0.68 0.92 1.31 31.25 26.52 0.65 0.15 0 Lower Ground R1 Residential LKD W1-U 0.68 0.92 1.31 31.25 26.52 0.65 1.00 1 Living Room W1-U 0.68 0.92 1.31 31.25 26.52 0.65 1.00 1 Lower Mortlake Road - Proposed | 0.85 |
| Living Room W4-L 0.68 0.92 0.71 29.80 65.43 0.65 0.15 C Living Room W4-U 0.68 0.92 1.31 34.76 65.43 0.65 1.00 0 Lower Ground R4 Residential Study W1-L 0.68 0.92 0.71 27.82 26.52 0.65 0.15 0 Lower Ground R4 Residential Study W1-U 0.68 0.92 1.31 31.25 26.52 0.65 0.15 0 Lower Ground R1 Residential LKD W1-L 0.68 0.92 4.34 39.49 181.28 0.65 0.15 0 Lower Ground R1 Residential LKD W1-L 0.68 0.92 4.34 39.49 181.28 0.65 0.15 0 | |
| Living Room W4-U 0.68 0.92 1.31 34.76 65.43 0.65 1.00 C Lower Ground R4 Residential Study W1-L 0.68 0.92 0.71 27.82 26.52 0.65 0.15 0 Lower Ground R4 Residential Study W1-U 0.68 0.92 1.31 31.25 26.52 0.65 0.15 0 Lower Ground R1 Residential LKD W1-L 0.68 0.92 4.34 39.49 181.28 0.65 0.15 0 Lower Ground R1 Residential LKD W1-L 0.68 0.92 4.34 39.49 181.28 0.65 0.15 0 Lower Ground R1 Residential LKD W1-L 0.68 0.92 4.34 39.49 181.28 0.65 0.15 0 | J.05 |
| Lower Ground R4 Residential Study W1-L 0.68 0.92 0.71 27.82 26.52 0.65 0.15 0 1 Study W1-U 0.68 0.92 1.31 31.25 26.52 0.65 1.00 1 47a Lower Mortlake Road - Proposed Lower Ground R1 Residential LKD W1-L 0.68 0.92 4.34 39.49 181.28 0.65 0.15 0 Lower Ground R1 Residential LKD W1-L 0.68 0.92 4.34 39.49 181.28 0.65 0.15 0 | ე.76 |
| Lower Ground R4 Residential Study W1-L 0.68 0.92 0.71 27.82 26.52 0.65 0.15 0 1 Study W1-U 0.68 0.92 1.31 31.25 26.52 0.65 1.00 1 47a Lower Mortlake Road - Proposed Lower Ground R1 Residential LKD W1-L 0.68 0.92 4.34 39.49 181.28 0.65 0.15 0 LWD W1-L 0.68 0.92 4.34 39.49 181.28 0.65 0.15 0 | 2.27 1.50 |
| Study W1-U 0.68 0.92 1.31 31.25 26.52 0.65 1.00 1 47a Lower Mortlake Road - Proposed Lower Ground R1 Residential LKD W1-L 0.68 0.92 4.34 39.49 181.28 0.65 0.15 0 Lower Ground R1 Residential LKD W1-L 0.68 0.92 4.34 39.49 181.28 0.65 0.15 0 | J.12 |
| 1 47a Lower Mortlake Road - Proposed Lower Ground R1 Residential LKD W1-L 0.68 0.92 4.34 39.49 181.28 0.65 0.15 0 LWD W1-L 0.68 0.92 4.34 191.28 0.65 0.15 0 | 1.68 |
| 47a Lower Mortlake Road - Proposed Lower Ground R1 Residential LKD W1-L 0.68 0.92 4.34 39.49 181.28 0.65 0.15 0 LWD W1-L 0.68 0.92 4.34 39.49 181.28 0.65 0.15 0 | 1.80 1.50 |
| Lower Ground R1 Residential LKD W1-L 0.68 0.92 4.34 39.49 181.28 0.65 0.15 0 LWD W1-L 0.68 0.92 10.22 43.24 191.28 0.65 0.15 0 | |
| | 0.15 |
| LKD W1-0 0.00 0.92 10.22 42.34 181.28 0.05 1.00 2 | 2.61 |
| 2 | 2.76 2.00 |
| Lower Ground R2 Residential Bedroom W2-L 0.68 0.92 1.39 31.66 61.37 0.65 0.15 0 | 0.12 |
| Bedroom W2-U 0.68 0.92 2.54 42.59 61.37 0.65 1.00 1 | 1.92 |
| 2 | 2.04 1.00 |
| Lower Ground R3 Residential Bedroom W3-L 0.68 0.92 1.43 28.10 59.49 0.65 0.15 0 | J.11 |
| Bedroom W3-U 0.68 0.92 2.61 37.86 59.49 0.65 1.00 1 | 1.81 |
| 1 | 1.93 1.00 |
| Upper Ground R1 Residential Bedroom W1 0.68 0.92 0.99 51.36 57.11 0.65 1.00 <u>0</u> |).97 |
| 0 |).97 1.00 |
| Upper Ground R2 Residential Bedroom W2 0.68 0.92 0.99 55.40 57.14 0.65 1.00 1 | 1.05 |
| 1 | 1 05 1 00 |
| Upper Ground R3 Residential Bedroom W3 0.68 0.92 1.10 56.93 57.14 0.65 1.00 1 | 1.00 |
| 1 | 1.19 |

Project Name: LOWER MORTLAKE ROAD Project No.: 190629-REL02 Report Title: Average Daylight Factor (ADF) Analysis to Proposed Rooms Date: 16/12/2021

| Floor Ref | Room Ref | Property Type | Room Use | Window Ref | Glass Transmittance | Maintenance Factor | Glazed Area | Clear Sky Angle Proposed | Room Surface Area | Average Surface Reflectance | Below Working Plane Factor | ADF Proposed | Req'd Value |
|--------------|----------|---------------|----------|------------|------------------------|-----------------------|----------------|--------------------------------|-------------------------|-----------------------------------|-------------------------------------|-----------------|----------------|
| Upper Ground | R4 | Residential | Bedroom | W4-L | 0.68 | 0.92 | 0.71 | 38.65 | 66.97 | 0.65 | 0.15 | 0.07 | |
| | | | Bedroom | W4-U | 0.68 | 0.92 | 1.31 | 44.36 | 66.97 | 0.65 | 1.00 | 0.94 | |
| | | | | | | | | | | | | 1.01 | 1.00 |
| Upper Ground | R5 | Residential | Bedroom | W5-L | 0.68 | 0.92 | 0.01 | 38.48 | 62.84 | 0.65 | 0.15 | 0.00 | |
| | | | Bedroom | W5-U | 0.68 | 0.92 | 0.54 | 41.80 | 62.84 | 0.65 | 1.00 | 0.39 | |
| | | | Bedroom | W6-L | 0.68 | 0.92 | 0.04 | 82.40 | 62.84 | 0.65 | 0.15 | 0.01 | |
| | | | Bedroom | W6-U | 0.68 | 0.92 | 3.86 | 88.64 | 62.84 | 0.65 | 1.00 | 5.95 | |
| | | | Bedroom | W7-L | 0.68 | 0.92 | 0.01 | 37.71 | 62.84 | 0.65 | 0.15 | 0.00 | |
| | | | Bedroom | W7-U | 0.68 | 0.92 | 0.54 | 37.85 | 62.84 | 0.65 | 1.00 | 0.35 | |
| | | | | | | | | | | | | 6.70 | 1.00 |
| First | R1 | Residential | Bedroom | W1 | 0.68 | 0.92 | 2.26 | 75.26 | 56.97 | 0.65 | 1.00 | 3.26 | |
| | | | | | | | | | | | | 3.26 | 1.00 |
| First | R2 | Residential | Bedroom | W2-L | 0.68 | 0.92 | 0.71 | 53.16 | 66.97 | 0.65 | 0.15 | 0.09 | |
| | | | Bedroom | W2-U | 0.68 | 0.92 | 1.31 | 60.04 | 66.97 | 0.65 | 1.00 | 1.28 | |
| | | | | | | | | | | | | 1.37 | 1.00 |
| First | R3 | Residential | Bedroom | W3 | 0.68 | 0.92 | 1.73 | 85.80 | 54.67 | 0.65 | 1.00 | 2.96 | |
| | | | | | | | | | | | | 2.96 | 1.00 |
| First | R4 | Residential | Bedroom | W4 | 0.68 | 0.92 | 1.33 | 49.39 | 54.67 | 0.65 | 1.00 | 1.31 | |
| | | | | | | | | | | | | 1.31 | 1.00 |
| Second | R1 | Residential | Bedroom | W1 | 0.68 | 0.92 | 4.38 | 78.62 | 61.88 | 0.65 | 1.00 | 6.07 | |
| | | | | | | | | | | | | 6.07 | 1.00 |
| Second | R2 | Residential | Bedroom | W2 | 0.68 | 0.84 | 0.54 | N/A | 71.19 | 0.73 | 1.00 | 1.43 | |
| | | | Bedroom | W3 | 0.68 | 0.84 | 0.54 | N/A | 71.19 | 0.73 | 1.00 | 1.43 | |
| | | | | | | | | | | | | 2.86 | 1.00 |
| Second | R3 | Residential | Bedroom | W4 | 0.68 | 0.92 | 0.89 | 82.37 | 69.38 | 0.65 | 1.00 | 1.15 | |
| | | | Bedroom | W5 | 0.68 | 0.84 | 0.54 | N/A | 69.38 | 0.72 | 1.00 | 1.38 | |
| | | | | | | | | | | | | 2.54 | 1.00 |
| | | | | 49 Lo | wer Mortlake R | oad - Proposed | | | | | | | |

Project Name: LOWER MORTLAKE ROAD Project No.: 190629-REL02 Report Title: Average Daylight Factor (ADF) Analysis to Proposed Rooms Date: 16/12/2021

| Floor Ref | Room Ref | Property Type | Room Use | Window Ref | Glass Transmittance | Maintenance Factor | Glazed Area | Clear Sky Angle Proposed | Room Surface Area | Average Surface Reflectance | Below Working Plane Factor | ADF Proposed | Req'd Value |
|--------------|----------|---------------|-------------|------------|------------------------|-----------------------|----------------|--------------------------------|-------------------------|-----------------------------------|-------------------------------------|-----------------|----------------|
| Lower Ground | R2 | Residential | Living Room | W1-L | 0.68 | 0.92 | 0.71 | 17.67 | 66.03 | 0.65 | 0.15 | 0.03 | |
| | | | Living Room | W1-U | 0.68 | 0.92 | 1.31 | 29.47 | 66.03 | 0.65 | 1.00 | 0.64 | |
| | | | Living Room | W2-L | 0.68 | 0.92 | 0.71 | 19.72 | 66.03 | 0.65 | 0.15 | 0.03 | |
| | | | Living Room | W2-U | 0.68 | 0.92 | 1.31 | 31.78 | 66.03 | 0.65 | 1.00 | 0.69 | |
| | | | Living Room | W3-L | 0.68 | 0.92 | 0.71 | 23.82 | 66.03 | 0.65 | 0.15 | 0.04 | |
| | | | Living Room | W3-U | 0.68 | 0.92 | 1.31 | 34.20 | 66.03 | 0.65 | 1.00 | 0.74 | |
| | | | | | | | | | | | | 2.17 | 1.50 |

OUR SERVICE LINES

