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Viacom Camden Lock Ltd,

17-29 Hawley Crescent,

Camden, NW1 8TT

Daylight & Sunlight Report

Director:	Nick Lane
Client:	VIACOM
Date:	March 2015
Version:	2
Project:	P443

Contents

Appendices

1 Executive Summary

1.1 Point 2 Surveyors have undertaken a daylight and sunlight assessment of WATG Architects proposed development for 17-29 Hawley Crescent site in Camden.

1.2 The assessment shows that overall 100% of the surrounding residential windows assessed will meet the BRE Guidelines recommendations in respect of both daylight and sunlight.

1.3 Since our assessment there have been some minor amendments to the proposed development. These incur some small and immaterial changes to the proposed massing which will not affect the daylight and sunlight position reflected by our analysis.

2 Introduction

2.1 Point 2 Surveyors have undertaken a quantitative daylight and sunlight assessment on behalf of Viacom Camden Lock Ltd of the WATG Architects proposed development for the 17-29 Hawley Crescent site. This analysis has been based upon the laser scan survey undertaken by Point 2 Surveyors and supplemented by our own site photographs and further research.

2.2 To improve the accuracy of the analysis, we have obtained any floor plans for the surrounding properties that are available via Camden's Planning Portal or through our own further research and incorporated them into the 3D digital model. Where it is not possible to obtain floor plans for properties assumptions have been made as to their probable internal configuration, based upon observations on site and incorporating any additional information obtained via our research.

2.3 This report will assess the potential daylight and sunlight effects as a result of the proposal on the surrounding residential properties.

Sources of Information

2.4 In the process of compiling this report, the following sources of information have been used:

Point 2 Surveyors
Site Survey
Site Photography

WATG Architects
Proposed Received 20/02/15

CAMDEN COUNCIL
Planning Drawings

Z-MAPPING

3 Methodology

3.1 The recognised methodology for undertaking daylight and sunlight assessments is provided by the Building Research Establishment 'Site planning for daylight and sunlight – a guide to good practice'; commonly referred to as "the BRE Guidelines".

3.2 The BRE Guidelines were construed in relation to a suburban environment and openly acknowledge that they should be interpreted flexibly in other more dense urban locations. As such, the recommendations of the BRE Guidelines should not be perceived as rigid numerical criteria, but should be re-evaluated in the context of each site by considering the relative density and the development context of the surrounding area.

3.3 When assessing any potential effects on the surrounding properties, the BRE guidelines suggest that only those windows that have a reasonable expectation of daylight or sunlight need to be assessed. In particular the BRE guidelines at paragraph 2.2.2 state:

> *"The guidelines given here are intended for use for rooms in adjoining dwellings where daylight is required, including living rooms, kitchens and bedrooms. Windows to bathrooms, toilets, storerooms, circulation areas and garages need not be analysed."*

3.4 Further to the above statement, it is considered that the vast majority of commercial properties do not have a reasonable expectation of daylight or sunlight. This is because they are generally designed to rely on artificial electric lighting rather than natural light, particularly in dense city centre locations such as this.

3.5 If a property is considered to have a reasonable expectation of daylight or sunlight the following methodology to assess the impacts has been used:

Daylighting

3.6 It is common to consider the local authorities planning policy in order to establish the basis for which consideration in relation to light should be approached. The following can be used as a quick test to assess the likely effect on existing surrounding properties:

a) Project a 25 degree line from the centre of the lowest window on the existing building;

b) If the whole of your new development is lower than this line then it is unlikely to have a substantial effect on the daylight enjoyed by occupants in the existing building.

3.7 The above test is also known as the 25° angle test but has not been used for this assessment as it does not reflect the differing heights and layouts of the buildings in the local area.

3.8 More detailed tests can be undertaken to fully assess the loss of daylight in existing buildings, in particular the use of the Vertical Sky Component (VSC) method of assessment.

The Vertical Sky Component is expressed as a ratio of the maximum value of daylight achievable for a completely unobstructed vertical wall. The maximum value is almost 40%. This is because daylight hitting a window can only come from one direction immediately halving the available light. The value is limited further by the angle of the sun. This is why if the VSC is greater than 27% enough sunlight [SIC] should be reaching the existing window. Any reduction below this level should be kept to minimum.

Windows to some existing rooms may already fail to achieve this target under existing conditions. In these circumstances it is possible to accept a reduction to the existing level of daylight to no less than 80% of its former value.

3.9 In summary of the above, a room is considered to continue to receive good levels of daylight if the window can receive a VSC of at least 27%. If the window receives a VSC below 27% in the existing scenario a reduction of less than 0.8 times its former value (20%), as a result of the proposed development, is considered acceptable.

3.10 In conjunction with the VSC tests, the BRE guidelines and British Standard 8206-Part2:2008 suggest that the distribution of daylight is assessed using the No Sky Line (NSL) test. This test separates those areas of the working plane that can receive direct skylight and those that cannot.

3.11 The BRE guidelines suggest that the daylight distribution test is undertaken to existing surrounding properties when the internal arrangements are known. To assess the impact of any reduction the BRE guidelines suggest:

"If, following construction of a new development, the no sky line moves so that the area of the existing room, which does receive direct skylight, is reduced to less than 0.8 times its former value this will be noticeable to the occupants, and more of the room will appear poorly lit."

<u>Sunlighting</u>

3.12 The amount of direct sunlight a window can enjoy is dependent on its orientation and the extent of any external obstructions. For example a window that faces directly north, no matter what external obstructions are present, will not be able to receive good levels of sunlight throughout the year. However, a window that faces directly south with no obstructions will enjoy very high levels of sunlight throughout the year. As the potential to receive sunlight is dependent on a window's orientation, the BRE guidelines state:

"To assess loss of sunlight to an existing building, it is suggested that all main living rooms of dwellings, and conservatories, should be checked if they have a window facing within 90° of due south. Kitchens and bedrooms are less important, although care should be taken not to block too much sun."

3.13 To consider any sunlight effect to the surrounding properties the BRE guidelines suggest calculating the Annual Probable Sunlight Hours (APSH) at the centre of each window on the outside face of the window wall. The BRE guidelines suggest that:

"If this window point can receive more than one quarter of APSH (see section 3.1), including at least 5% of APSH in the winter months between 21st September and 21st March, then the room should still receive enough sunlight."

3.14 If the above criteria is not met, the BRE guidelines suggest calculating the APSH at the window in the existing situation, i.e. before redevelopment. If the reduction of APSH between the existing and proposed situations is less than 0.8 times its former value for either the total APSH or in the winter months; and greater than 4% for the total APSH, then the occupants of the adjoining building are likely to notice the reduction in sunlight.

3.15 In assessing the daylight and sunlight to the neighbouring buildings as well as assessing the quality of light within the proposed habitable rooms that make up the residential units, the true existing baseline condition has been observed. This includes all neighbouring buildings and obstructions within the vicinity that could be affected by the scheme proposal and or affect the potential for light entering into the proposed residential rooms within the scheme.

4 The Site and the Proposal

4.1 The site is located in the London Borough of Camden on Hawley Crescent. The existing buildings on site are typically of four storeys in height with a large servicing courtyard area in the centre of the site.

4.2 Drawings P443/01-03 in Appendix 1 illustrate the existing buildings on site and the location of the surrounding properties.

4.3 The WATG Architects proposed development of the site entails infilling the courtyard area of the site and adding an additional two storeys of massing at 4th and 5th floor level which extend to the north above the existing warehouse buildings to the rear.

4.4 Drawings P443/04-06 in Appendix 1 illustrate the location and massing of the proposed development in the context of the surrounding properties.

4.5 It should be noted that subsequent to the daylight and sunlight assessment undertaken for this report, some minor amendments to the proposed development were implemented. These amendments entail a small increase in the height of the western element of the Hawley Street elevation of the proposed development by circa 3 metres and a small decrease in height of the eastern elevation by circa 3 metres. An additional drawing illustrating these minor changes in massing is included in Appendix 3.

5 Surrounding Properties

5.1 To identify the residential properties relevant for our daylight and sunlight assessment, we have undertaken VOA searches for all the properties in the vicinity of the site. We have also supplemented this research through our own site investigations. On this basis, we believe the following properties are in residential use and are close enough to the site to be materially affected by the proposed development:

- 1-11 Lawrence House (3rd floor)
- 15-16 Stucley Place (1st floor and above)
- 218 Camden High Street (second floor)
- The Elephants Head Public House (1sr floor and above)
- 226-236 Camden High Street (1st floor and above)

5.2 Site plans illustrating the location of each of these properties are included in Appendix 1.

5.3 The remaining surrounding properties are either too far away to be affected by the implementation of the proposed development or understood to be of commercial use and not considered to have an expectation for daylight or sunlight. Detailed daylight and sunlight assessments have not therefore been undertaken for these properties.

6 Assessment Results for Impacts to Neighbouring Properties

6.1 VSC, NSL and where appropriate APSH analysis has been undertaken in respect of those properties identified above as containing residential accommodation or having a reasonable expectation of daylight and sunlight amenity.

6.2 The VSC daylight analysis, detailed results of which are contained within Appendix 2, shows that 100% (48 out of 48) of the windows assessed meet the BRE Guidelines recommendations. The NSL analysis shows that 97% (36 out of 37) of the rooms assessed will comply with the Guidelines. However, it should be noted that the only room which does not technically meet the BRE Guidelines recommendations in relation to the NSL assessment only marginally exceeds the recommended 20% threshold, recording a reduction of 20.7% from the existing situation.

6.3 The minor amendments to the massing will not change the daylight position reflected above. The results in Appendix 2 show that the daylight effect to the rear residential windows in 226-236 Camden High Street is in all cases well within the BRE Guidelines recommendations and this position will not change as a result of these amendments. The results also show that the daylight effect to 1-11 Lawrence House is also well within the guidelines and this position would only improve with the amendments to the proposal.

6.4 In relation to sunlight, there is only one property that has any windows orientated within 90° of due south and are therefore relevant for quantitative assessment. These are the upper floors of the Elephants Head Public House. The APSH analysis for this property shows that 100% (4 out of 4) of the individual windows assessed will meet the BRE Guidance for sunlight. In addition, each of the two rooms assumed to be served by these windows will also meet the guidelines recommendations when the sunlight amenity is considered for the room as a whole.

6.5 There will also be no material change to the sunlight position as a result of the minor amendments to the proposed development.

Appendix 1 – Drawings

Sources: POINT2SURVEYORS LTD
Site Survey
Site Photography

WATG
Proposed Received 20/02/2015

CAMDEN COUNCIL
Planning Drawings

Z-MAPPING

Key:

Existing

N

Project: MTV
Hawley Crescent, London

Title: Site Plan
Existing Buildings

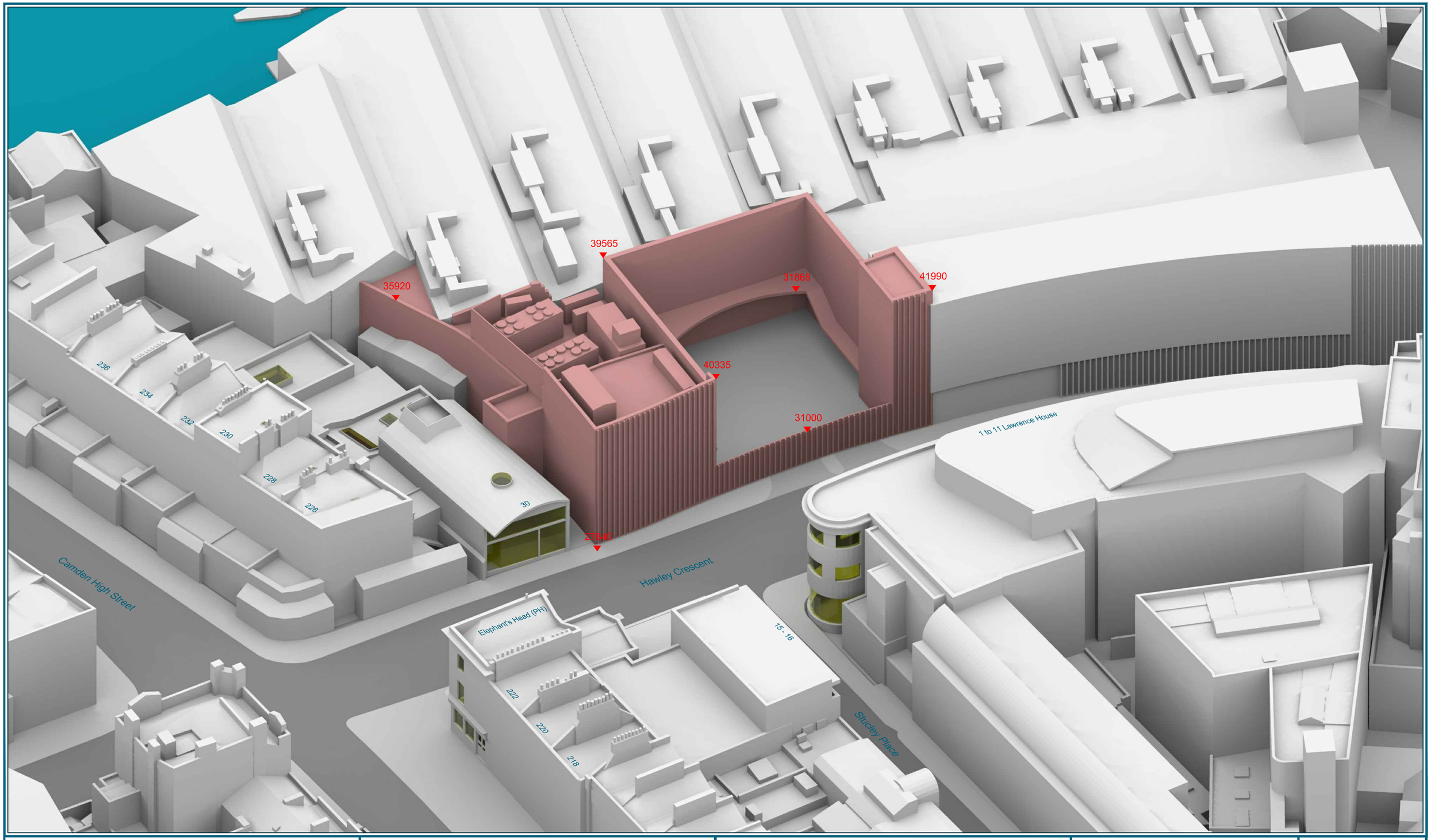
Point 2 Surveyors Ltd,
Centric House,
390 Strand,
London WC2R 0LT,
0207 836 5828
www.point2surveyors.com

Drawn By: FA

Scale: 1:450

Date: FEB 15

Dwg No: **P443/01**



Sources: POINT2SURVEYORS LTD
Site Survey
Site Photography

WATG
Proposed Received 20/02/2015

CAMDEN COUNCIL
Planning Drawings

Z-MAPPING

Key: All heights in mm AOD

Existing

Project: MTV
Hawley Crescent, London

Title: 3D View
Existing Buildings

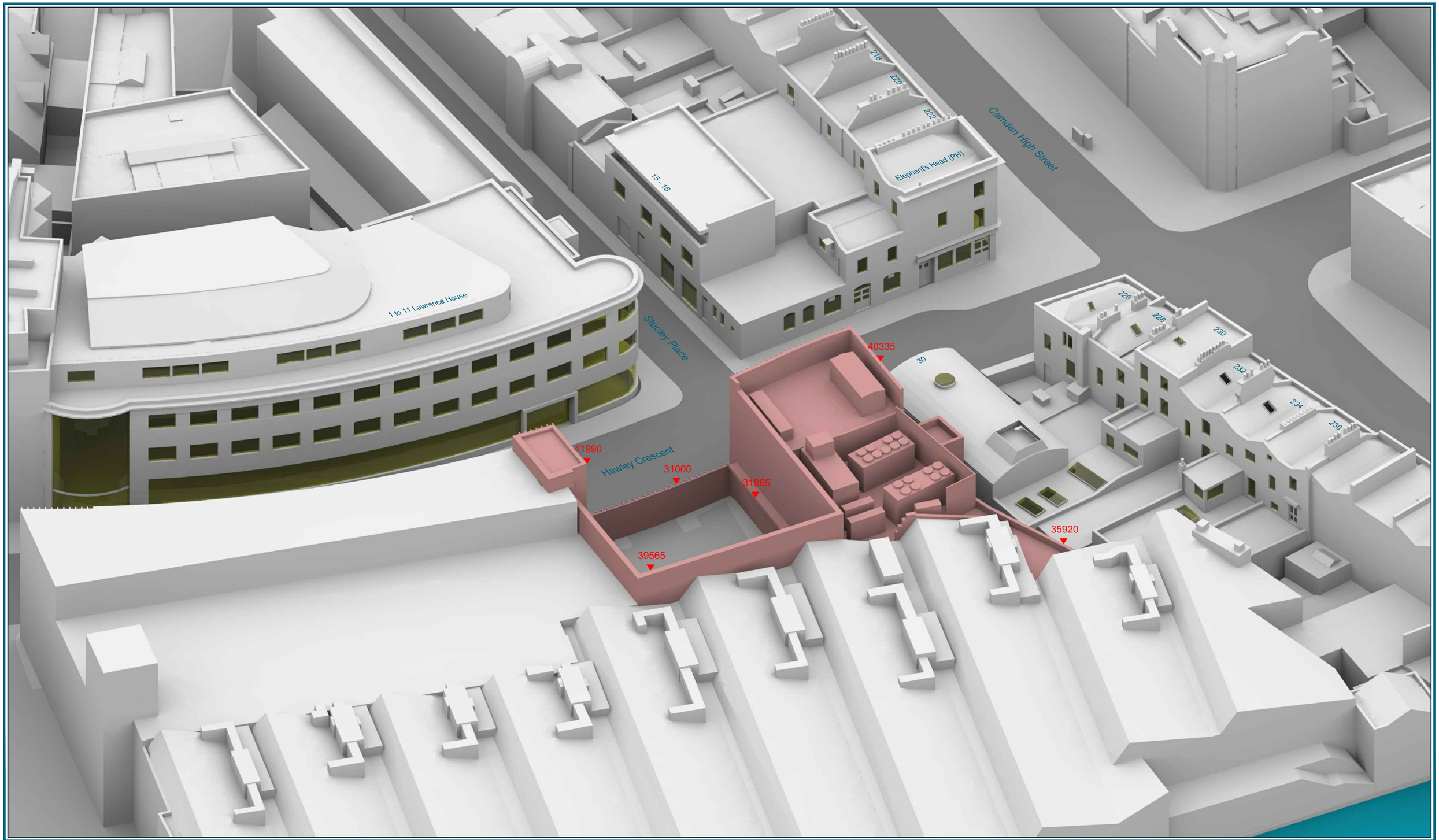
Point 2 Surveyors Ltd,
Centric House,
390 Strand,
London WC2R 0LT,
0207 836 5828
www.point2surveyors.com

Drawn By: FA

Scale: NTS

Date: FEB 15

Dwg No: **P443/02**



Sources: POINT2SURVEYORS LTD
Site Survey
Site Photography

WATG
Proposed Received 20/02/2015

CAMDEN COUNCIL
Planning Drawings

Z-MAPPING

Key: All heights in mm AOD

Existing

Project: MTV
Hawley Crescent, London

Title: 3D View
Existing Buildings

Point 2 Surveyors Ltd,
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0207 836 5828
www.point2surveyors.com

Drawn By: FA

Scale: NTS

Date: FEB 15

Dwg No: **P443/03**

Sources: POINT2SURVEYORS LTD
Site Survey
Site Photography

WATG
Proposed Received 20/02/2015

CAMDEN COUNCIL
Planning Drawings

Z-MAPPING

Key:

Proposed Scheme

N

Project: MTV
Hawley Crescent, London

Title: Site Plan
Proposed Scheme dated 20/02/2015

Point 2 Surveyors Ltd,
Centric House,
390 Strand,
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0207 836 5828
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Drawn By: FA

Scale: 1:450

Date: FEB 15

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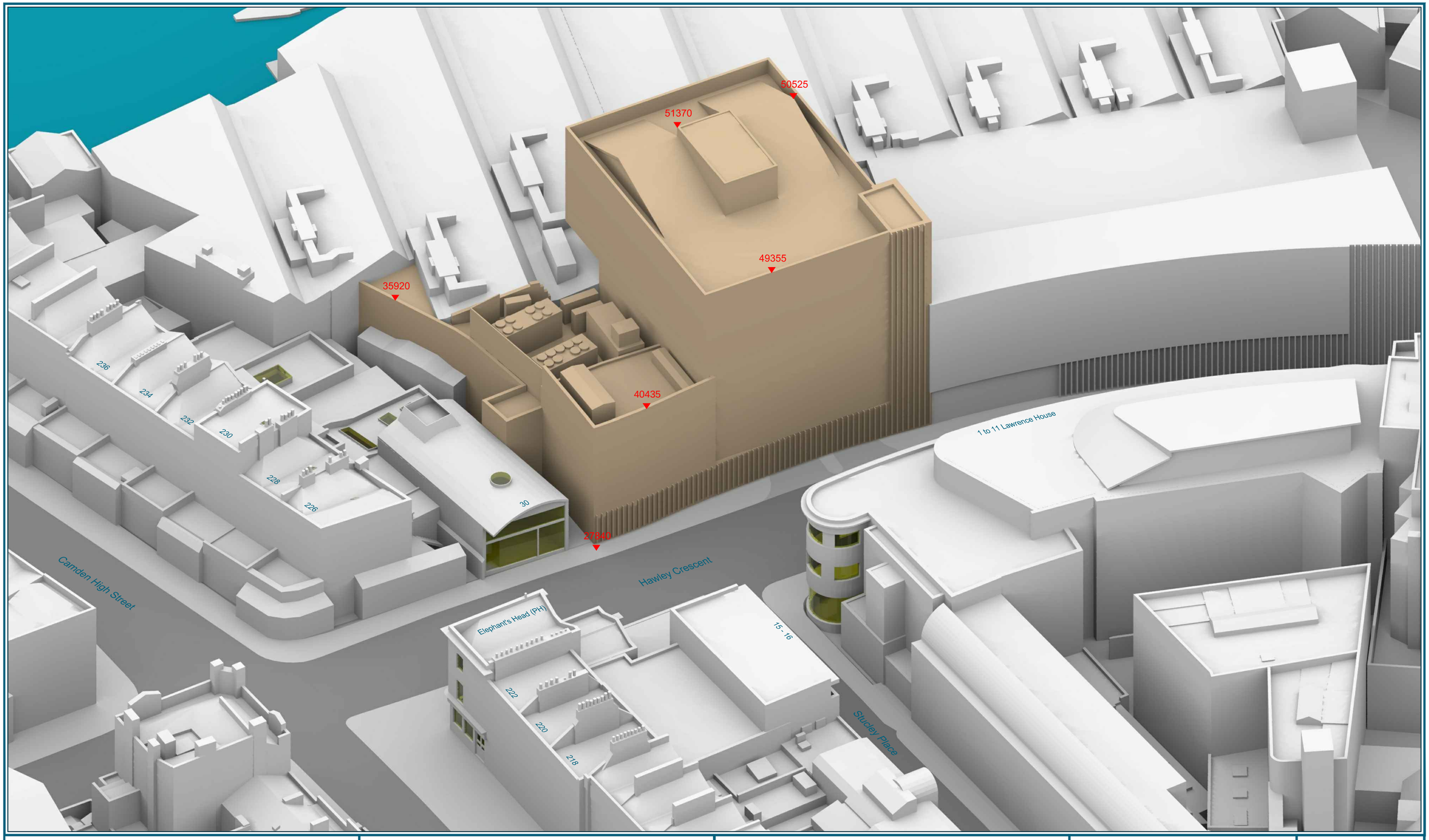

Sources: POINT2SURVEYORS LTD
Site Survey
Site Photography

WATG
Proposed Received 20/02/2015

CAMDEN COUNCIL
Planning Drawings

Z-MAPPING

Key: All heights in mm AOD

Proposed Scheme

Project: MTV
Hawley Crescent, London

Title: 3D View
Proposed Scheme dated 20/02/2015

Point 2 Surveyors Ltd,
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0207 836 5828
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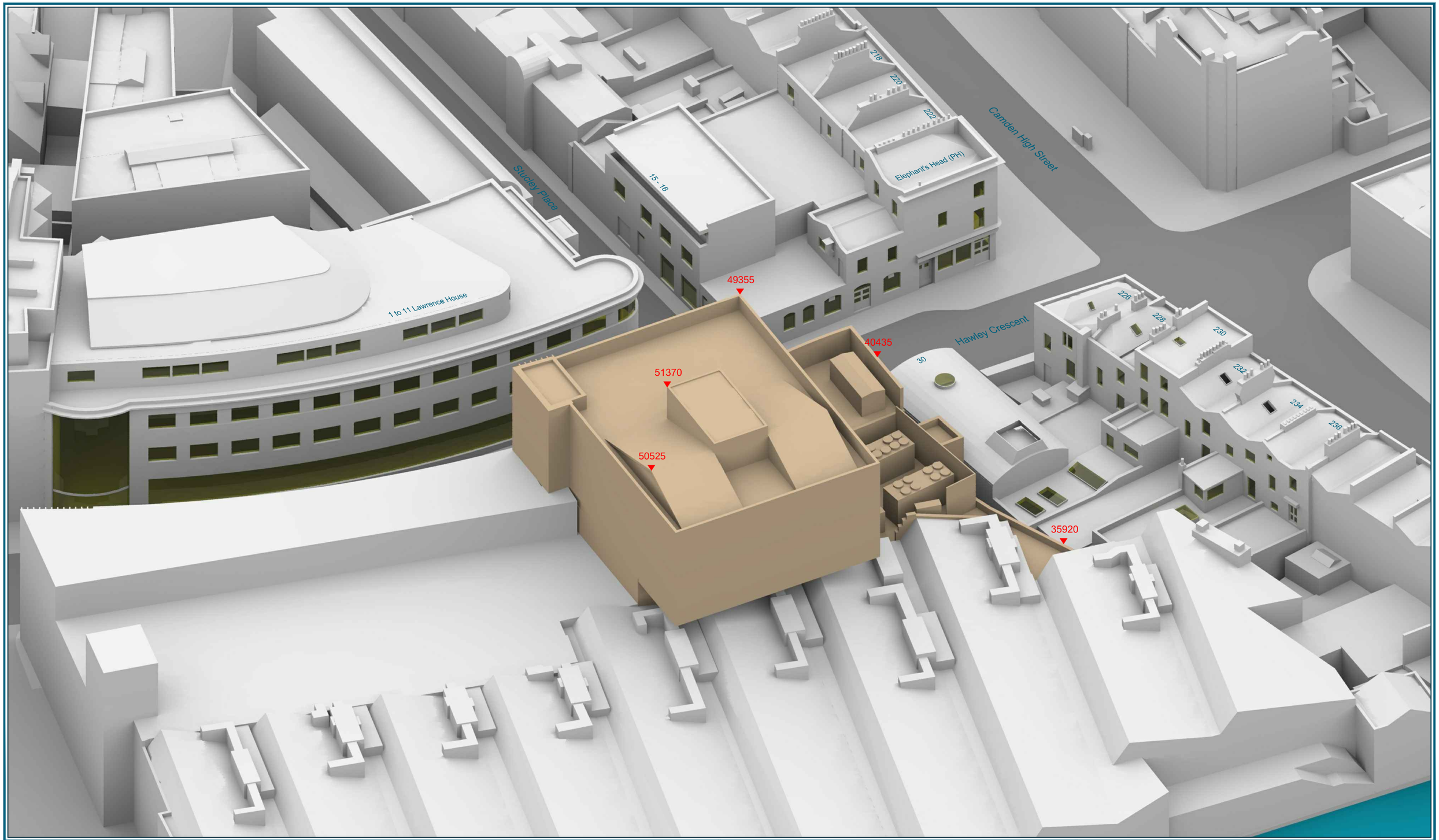
Drawn By: FA

Scale: NTS

Date: FEB 15

Dwg No: **P443/05**



Sources: POINT2SURVEYORS LTD
Site Survey
Site Photography

WATG
Proposed Received 20/02/2015

CAMDEN COUNCIL
Planning Drawings

Z-MAPPING

Key: All heights in mm AOD

Proposed Scheme

Project: MTV
Hawley Crescent, London

Title: 3D View
Proposed Scheme dated 20/02/2015

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0207 836 5828
www.point2surveyors.com

Drawn By: FA

Scale: NTS

Date: FEB 15

Dwg No: **P443/06**

Appendix 2 – Daylight & Sunlight Results

Room	Room Use	Window	EXISTING VSC	PROPOSED VSC	LOSS VSC	%LOSS VSC
1 to 11 Lawrence House						
R1/153	UNKNOWN	W1/153	37.14	36.58	0.56	1.51
R2/153	UNKNOWN	W2/153	39.16	38.32	0.84	2.15
R4/153	UNKNOWN	W4/153	39.17	37.86	1.31	3.34
R5/153	UNKNOWN	W5/153	39.10	36.89	2.21	5.65
R7/153	UNKNOWN	W7/153	39.05	35.76	3.29	8.43
R8/153	UNKNOWN	W8/153	39.04	33.74	5.30	13.58
R9/153	UNKNOWN	W9/153	39.05	32.52	6.53	16.72
R9/153	UNKNOWN	W10/153	39.04	31.46	7.58	19.42
R9/153	UNKNOWN	W11/153	38.82	34.01	4.81	12.39
15 - 16 Stucley Place						
R1/131	LIVINGROOM	W1/131	25.11	22.78	2.33	9.28
R1/131	LIVINGROOM	W2/131	25.22	23.74	1.48	5.87
R2/131	BEDROOM	W3/131	25.39	24.43	0.96	3.78
R3/131	BEDROOM	W4/131	25.53	24.95	0.58	2.27
R1/132	LIVINGROOM	W1/132	10.38	8.57	1.81	17.44
R1/132	LIVINGROOM	W2/132	10.30	9.12	1.18	11.46
R2/132	BEDROOM	W3/132	10.39	9.50	0.89	8.57
R3/132	BEDROOM	W4/132	10.56	9.86	0.70	6.63
Elephant's Head (PH)						
R1/101	ASSUMED	W1/101	32.25	32.25	0.00	0.00
R1/101	ASSUMED	W2/101	33.72	32.85	0.87	2.58
R1/102	ASSUMED	W1/102	33.62	33.62	0.00	0.00
R1/102	ASSUMED	W2/102	35.59	34.57	1.02	2.87
R2/102	ASSUMED	W3/102	35.75	33.69	2.06	5.76
R3/102	ASSUMED	W4/102	35.94	34.03	1.91	5.31
218 to 222 Camden High Street						
R1/122	BEDROOM	W1/122	34.15	32.55	1.60	4.69
R2/122	BEDROOM	W2/122	35.35	34.04	1.31	3.71
R3/122	BEDROOM	W3/122	35.71	34.80	0.91	2.55
226 Camden High Street						

Room	Room Use	Window	EXISTING VSC	PROPOSED VSC	LOSS VSC	%LOSS VSC
R1/25	ASSUMED	W1/25	30.30	27.81	2.49	8.22
R1/26	ASSUMED	W1/26	34.45	31.12	3.33	9.67
R2/26	ASSUMED	W2/26	35.03	31.73	3.30	9.42
R2/26	ASSUMED	W3/26	76.82	75.78	1.04	1.35
228 Camden High Street						
R1/35	ASSUMED	W1/35	28.53	25.81	2.72	9.53
R1/36	ASSUMED	W1/36	36.12	32.62	3.50	9.69
230 Camden High Street						
R1/41	ASSUMED	W1/41	29.59	26.99	2.60	8.79
R1/45	ASSUMED	W1/45	30.86	27.74	3.12	10.11
R1/46	ASSUMED	W1/46	36.40	33.14	3.26	8.96
R1/47	ASSUMED	W1/47	38.91	35.55	3.36	8.64
232 Camden High Street						
R1/52	ASSUMED	W1/52	35.60	32.66	2.94	8.26
R1/55	ASSUMED	W1/55	25.91	23.29	2.62	10.11
R1/56	ASSUMED	W1/56	37.63	34.67	2.96	7.87
234 Camden High Street						
R1/61	KITCHEN	W1/61	24.72	24.41	0.31	1.25
R1/62	ASSUMED_KIT	W1/62	37.61	35.31	2.30	6.12
R1/65	BATHROOM	W1/65	24.04	24.04	0.00	0.00
R1/65	BATHROOM	W2/65	28.95	26.21	2.74	9.46
236 Camden High Street						
R1/75	ASSUMED	W1/75	28.52	26.71	1.81	6.35
R1/75	ASSUMED	W2/75	28.51	26.78	1.73	6.07
R1/75	ASSUMED	W3/75	28.49	26.79	1.70	5.97
R1/75	ASSUMED	W4/75	28.52	26.90	1.62	5.68
R1/76	ASSUMED	W1/76	37.59	35.66	1.93	5.13

Room/ Floor	Room Use	Whole Room	Prev sq ft	New sq ft	Loss sq ft	%Loss
1 to 11 Lawrence House						
R1/153	UNKNOWN	148.2	142.2	142.2	0.0	0.0
R2/153	UNKNOWN	145.2	144.9	144.9	0.0	0.0
R4/153	UNKNOWN	116.5	115.0	115.0	0.0	0.0
R5/153	UNKNOWN	138.0	134.6	133.9	0.7	0.5
R7/153	UNKNOWN	147.4	142.0	142.0	0.0	0.0
R8/153	UNKNOWN	156.5	156.1	149.8	6.3	4.0
R9/153	UNKNOWN	275.2	274.6	274.6	0.0	0.0
15 - 16 Stucley Place						
R1/131	LIVINGROOM	337.1	301.4	241.6	59.9	19.9
R2/131	BEDROOM	135.9	132.8	132.8	0.0	0.0
R3/131	BEDROOM	134.8	125.4	125.4	0.0	0.0
R1/132	LIVINGROOM	222.1	219.0	219.0	0.0	0.0
R2/132	BEDROOM	87.8	86.1	86.1	0.0	0.0
R3/132	BEDROOM	93.8	91.5	91.5	0.0	0.0
Elephant's Head (PH)						
R1/101	ASSUMED	130.0	129.0	129.0	0.0	0.0
R1/102	ASSUMED	130.0	129.0	129.0	0.0	0.0
R2/102	ASSUMED	68.4	65.3	65.3	0.0	0.0
R3/102	ASSUMED	75.6	70.6	70.6	0.0	0.0
218 to 222 Camden High Street						
R1/122	BEDROOM	85.9	81.5	81.5	0.0	0.0
R2/122	BEDROOM	83.5	79.4	79.4	0.0	0.0
R3/122	BEDROOM	84.1	81.2	81.2	0.0	0.0
226 Camden High Street						
R1/25	ASSUMED	44.8	36.8	36.8	0.0	0.0
R1/26	ASSUMED	107.3	101.3	89.7	11.6	11.5
R2/26	ASSUMED	62.1	56.7	56.7	0.0	0.0
228 Camden High Street						
R1/35	ASSUMED	81.2	75.2	75.2	0.0	0.0
R1/36	ASSUMED	92.9	87.8	87.8	0.0	0.0
230 Camden High Street						
R1/41	ASSUMED	58.2	57.4	45.5	11.9	20.7
R1/45	ASSUMED	97.4	95.3	85.0	10.3	10.8
R1/46	ASSUMED	102.4	99.4	94.8	4.6	4.6
R1/47	ASSUMED	102.4	99.2	92.9	6.3	6.4
232 Camden High Street						
R1/52	ASSUMED	62.9	61.8	58.6	3.3	5.3
R1/55	ASSUMED	109.0	105.5	105.5	0.0	0.0
R1/56	ASSUMED	109.0	105.4	105.4	0.0	0.0

Room/ Floor	Room Use	Whole Room	Prev sq ft	New sq ft	Loss sq ft	%Loss
234 Camden High Street						
R1/61	KITCHEN	106.5	103.3	103.0	0.3	0.3
R1/62	ASSUMED_KI	106.5	104.1	104.1	0.0	0.0
R1/65	BATHROOM	34.2	34.2	34.2	0.0	0.0
236 Camden High Street						
R1/75	ASSUMED	115.5	101.5	100.9	0.7	0.7
R1/76	ASSUMED	115.5	111.7	108.9	2.8	2.5

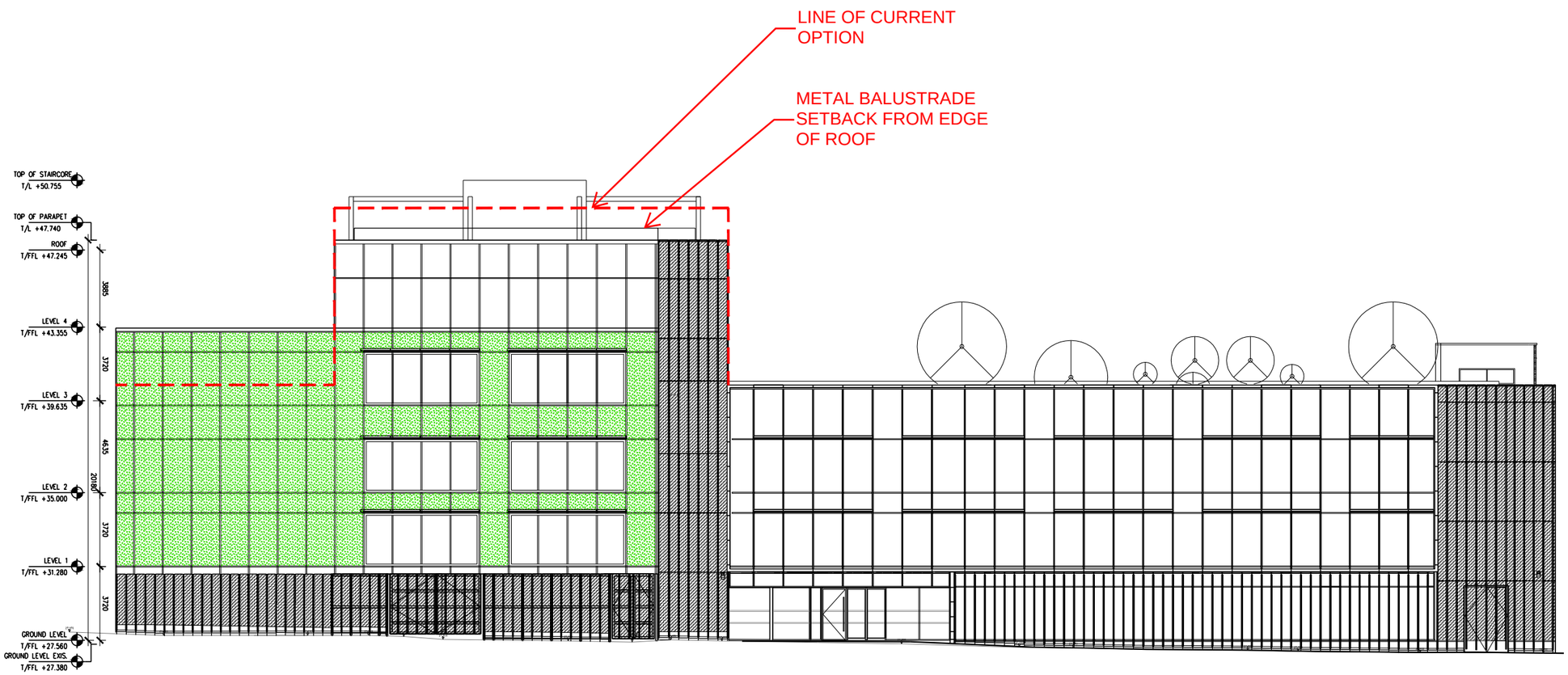
MTV
HAWLEY CRESCENT
LONDON

SUNLIGHT ANALYSIS
PROPOSED SCHEME
PR200215

FEB 2015

			Window						Room					
			Existing		Proposed				Existing		Proposed			
Room	Window	Room Use	Winter APSH	Annual APSH	Winter APSH	Annual APSH	Winter %Loss	Annual %Loss	Winter APSH	Annual APSH	Winter APSH	Annual APSH	Winter %Loss	Annual %Loss
Elephant's Head (PH)														
R1/101	**W1/101**	ASSUMED	19	60	19	60	0.0	0.0						
R1/101	**W2/101**	ASSUMED	1	16	1	16	0.0	0.0	20	62	20	62	0.0	0.0
R1/102	**W1/102**	ASSUMED	19	56	19	56	0.0	0.0						
R1/102	**W2/102**	ASSUMED	2	18	2	18	0.0	0.0	21	58	21	58	0.0	0.0

Appendix 3 – Elevation Illustrating Minor Amendments



WATG

strategy planning architecture landscape interiors

london | 44 0 20 7906 6600 watg.com

RIBA Chartered Practice

Project: VIMN HAWLEY CRESCENT

Description: ELEVATION - ALTERNATIVE OPTION B

Reference Dwg.: Date: 2015-03-04

Bulletin No.:

RFI No.:

SK No.: ASK - 063

Project No.: Scale: 1:250