DAYLIGHT, SUNLIGHT & OVERSHADOWING

32-34 Avenue Road

Produced by XCO2 for Private Client

April 2022

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Remarks	Draft	Revision					
Prepared by	AM	AM					
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Date	13/04/2022	21/04/2022					
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EXECUTIVE SUMMARY

The daylight, sunlight and overshadowing analysis indicates that there will not be a significant impact on surrounding properties arising from the proposed development at 32-34 Avenue Road and results are anticipated to be in line with daylight and sunlight levels expected in dense urban environments.

Daylight and Sunlight analysis was carried out for the proposed development at 32-34 Avenue Road, located within the London Borough of Camden. This report outlines the results of the analysis for the planning application, assessing the daylight and sunlight impacts on surrounding developments.

The methodology set out in this report is in accordance with BRE's "Site Layout Planning for Daylight and Sunlight, A Guide to Good Practice" by PJ Littlefair (2011) which is accepted as good practice by Planning Authorities.

The following assessments were carried out:

- Daylight: 25 Degree Line
- Daylight: Vertical Sky Component (VSC)
- Sunlight: Sunlight Access (Annual and Winter Sunlight Probable Hours ASHP & WSPH)
- Sunlight: Sunlight Overshadowing

Computer modelling software was used to carry out the assessments. The model used was based on drawings and a 3D model provided by the design team together with desktop research informing the neighbouring properties.

DAYLIGHT ASSESSMENT

A total of 49 windows from buildings surrounding the site were highlighted as being in close proximity to, and facing the proposed development.

Daylighting levels for potentially affected windows of surrounding developments by the proposed development at 32-34 Avenue Road were found to be acceptable and meet the BRE criteria.

In summary,

- 34no. out of 49no. windows passed the 25-degree line test;
- 10no. of the remaining 15no. windows achieved VSCs greater than 27%;
- 4no. of the remaining 5no. windows achieved relative VSCs over 0.8 of their former values and the reduction in daylight is unlikely to be noticeable based on the BRE guidelines;
- The remaining 1no. window is just marginally below the relative VSC target of 0.8; it also attains a VSC of over 20% which is generally deemed satisfactory level of daylight for urban environments, indicating this window will retain good levels of daylight; Furthermore, the associated window is part of a dual aspect room and the second window comply with the 25-degree line test, allowing the room to keep high levels of light.

Overall, the development is not anticipated to have any notable impact on the daylight received by neighbouring properties.

SUNLIGHT ASSESSMENT

A total of 38 south facing windows from buildings surrounding the site were assessed for sunlight access.

The analysis indicated that 26no. out of the 38no. windows passed the 25°/45° test. 10no. of the remaining 12no. windows have an APSH greater than 25% & WPSH greater than 5% or of at least 80% of their former value. 1no. of the remaining 2no. windows presents no more than 4% reduction in sunlight received over the whole year (ASHP). The remaining 1no. window is marginally below the ASHP criterion but above the relative 0.8 BRE criteria for annual probable sunlight hours (APSH).

Therefore, the proposed development at 32-34 Avenue Road is not considered to have any notable impact on sunlight access to windows of surrounding developments.

OVERSHADOWING ASSESSMENT

A solar access analysis was undertaken for a total of 3no. open spaces surrounding the proposed site for the full 24 hours on 21st of March. All the assessed amenity spaces are predicted to have a minimum of 2 hours of sunlight on 21 March over at least 50% of each assessed amenity space.

The proposed development is therefore not considered to have any significant impact on sunlight access to the amenity spaces surrounding the site.

Table 1: Daylight results summary.

Number of windows tested	**49**
Number of windows passing the 25°/45° initial test	34
Number of windows with a VSC higher than 27%	10
Number of windows with a VSC of at least 0.8 of existing value	4
Number of windows with a VSC marginally below 0.8 of existing value (>74%), with proposed VSC over 20% retaining good daylight levels and part of a dual aspect room	1
Number of windows that do not meet any of the above criteria	0

Table 2: Sunlight results summary.

Total number of windows facing within 90° of south	**38**
Number of south facing windows passing the 25°/45° initial test	26
Number of south facing windows with APSH greater than 25% and WPSH greater than 5%, or of at least 0.8 of their former existing value	10
Number of south facing windows with less than 4% reduction in annual sunlight	1
Number of south facing windows with a VSC marginally below 25% recommended by BRE (>24%) and a relative APSH greater than 0.8	1
Number of windows that do not meet any of the above criteria	0

INTRODUCTION

This report assesses the daylight, sunlight and overshadowing impacts the proposed new build residential development may have on the existing properties and open spaces surrounding the site.

The approach is based on the BRE's "*Site Layout Planning for daylight and sunlight, a Guide to good practice"* PJ Littlefair 2011, which is generally accepted as good practice by Town and Country Planning authorities.

It should be noted that although the numerical values stated by the BRE provide useful guidance to designers, consultants and planning officials, these are purely advisory and may vary depending on context. Dense urban areas, for example, may often experience greater site constraints when compared to low-rise suburban areas, and thus a high degree of obstruction is often unavoidable. Appendix F of the BRE document is dedicated to the use of alternative values and it also demonstrates the manner in which the criteria for skylight was determined for the summary given above, i.e. the need for 27% vertical sky component for adequate daylighting.

SITE

The proposed development is located within the London Borough of Camden and includes the demolition of existing building and construction of brand-new 3-storey residential building plus a lower ground floor.

Site analysis was carried out to identify any potential daylight and sunlight impacts on the surrounding development. Relevant properties tested in this report adjacent to the proposed development are annotated in the figure overleaf.

The following neighbouring buildings were tested in detail:

- 36 Avenue Road to the northwest of the application site
- Purifier House at Radlett Place located to the northeast of the application site
- 30 Avenue Road to the southeast of the application site

The remaining surrounding properties on Avenue Road are considered to be too far from the proposed scheme to be affected from daylight / sunlight perspective.

All buildings have been modelled based on existing drawings previously provided or by photographs and research from publicly available records.

Figure 1: Proposed site location and neighbouring buildings assessed.

METHODOLOGY

The assessment is based on guidelines set out in the BRE "Site Layout Planning for Daylight and Sunlight, A Guide to Good Practice" (2011).

DAYLIGHT

DAYLIGHT TO SURROUNDING WINDOWS

A plane is drawn at 25 degrees from the horizontal, at the centre of an existing window. If the new development intersects with this plane, the internal daylight levels of the surrounding windows may be reduced. When an obstruction of the 25-degree plane occurs, a more detailed assessment involving the Vertical Sky Component of the affected window would need to be carried out.

ABSOLUTE VERTICAL SKY COMPONENT (VSC)

The Vertical Sky Component is the ratio of the direct sky illuminance falling on the vertical wall at a reference point, to the simultaneous horizontal illuminance under an unobstructed sky. To maintain good levels of daylight, the Vertical Sky Component of a window needs to be 27% or greater. If the VSC is less than 27%, then a comparison of existing and proposed levels of VSC level would need to be calculated.

RELATIVE VERTICAL SKY COMPONENT

Good levels of daylighting can still be achieved if VSC levels are within 0.8 of their former value.

SUNLIGHT

ACCESS TO SUNLIGHT (APSH)

The BRE test relates mainly to existing living room windows, although care should be taken to ensure that kitchens and bedrooms receive reasonable amounts of sunlight. Annual Probable Sunlight Hour (APSH) assessment is carried out when there is an obstruction within the 25-degree line and the window is facing within 90 degrees due south. The APSH assessment states that the existing living room window should receive at least:

- 25% of annual probable sunlight hours (APSH) throughout the year;
- 5% of annual probable sunlight hours during the winter months;
- not less than 80% of its former sunlight hours during either period;
- not more than a 4% reduction in sunlight received over the whole year (APSH).

The term 'annual probable sunlight hours' refers to the long-term average of the total of hours during a year in which direct sunlight reaches the unobstructed ground (when clouds are taken into account). The 'winter probable sunlight hours' is used to mean the same but only for the winter period (21 September – 21 March).

OVERSHADOWING

SUNLIGHT TO AMENITY SPACES

Open spaces should retain a reasonable amount of sunlight throughout the year. The BRE states that for an amenity space to "appear adequately sunlit throughout the year, at least half of the area should receive at least 2 hours of sunlight on 21 March". Where this is not achieved, the difference between the area achieving 2 hours of sun on 21 March should be no less than 0.8 times its former value.

DAYLIGHT ASSESSMENT

The analysis indicates that the proposed development is unlikely to have a significant impact on neighbouring windows in terms of daylight. The following subsections detail the findings for each neighbouring building individually.

36 AVENUE ROAD

This building is located to the northwest of the proposed development. Figure 2 shows the assessed windows. A total number of 24no. windows were assessed.

It can be seen that the flank walls facing the proposed development may have some relatively narrow windows. Given their location to the corner of the building they have been assumed to belong to dual aspect rooms.

The results show that 11no. windows pass the 25-degree line test, 9no. windows achieve VSCs over 27%. 4no. windows maintain daylight levels within 0.8 of the former levels, meeting BRE's guidelines.

The table overleaf summarises the findings. Detailed results are presented in Appendix B - Detailed Daylight Results.

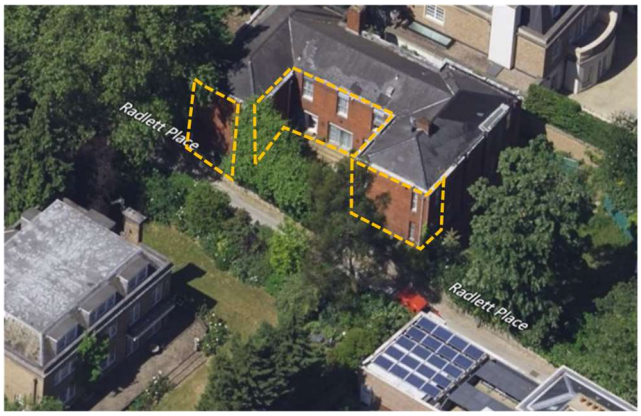

Figure 2: 36 Avenue Road.

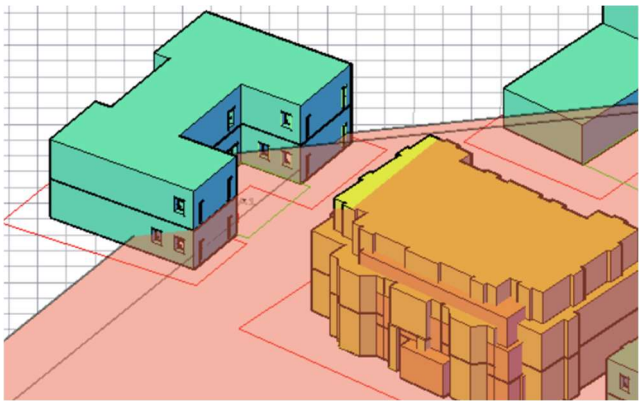
Figure 3: 36 Avenue Road 25-degree plane.

Table 3: Daylight results summary for 36 Avenue Road.

Number of windows tested	24
Number of windows passing the 25°/45° initial test	11
Number of windows with a VSC higher than 27%	9
Number of windows with a VSC of at least 0.8 of existing value	4
Number of windows that do not meet any of the above criteria	0

PURIFIER HOUSE

This building is located to the northeast of the proposed development. Figure 4 shows the assessed windows. A total number of 6no. windows were assessed. The windows are approximately 29m away from the proposed building avoiding any intersection with the 25-degree pane.

The results confirm that all 6no. windows passed the 25°/45° initial test. The table overleaf summarises the findings.

Detailed results are presented in Appendix B - Detailed Daylight Results.

Figure 4: Purifier House windows.

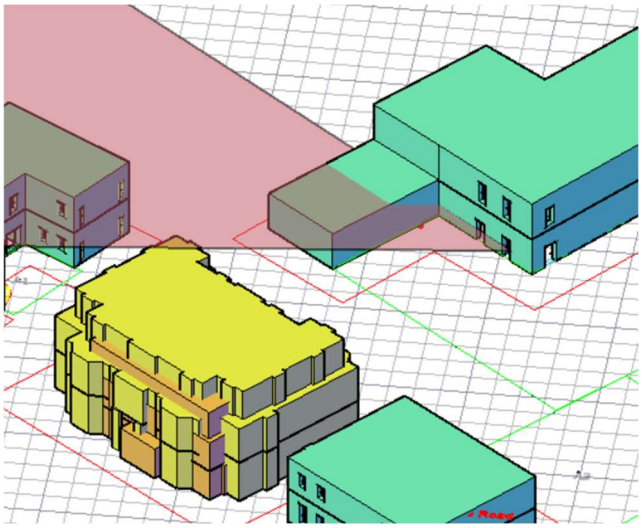
Figure 5: Purifier House 25-degree plan

Table 4: Daylight results summary for Purifier House.

Number of windows tested	6
Number of windows passing the 25°/45° initial test	6
Number of windows that do not meet any of the above criteria	0

30 AVENUE ROAD

This building is located to the southeast of the proposed development. Figure 6 shows the assessed windows. A total number of 19no. windows were assessed.

Figure 7 shows the layouts for 30 Avenue Road. All main habitable rooms are facing either towards the rear garden of the property or the front driveway. The windows on the flank wall belong to non-habitable spaces with no daylight expectation or to habitable rooms which are dual aspect with the main windows not obstructed from daylight / sunlight access perspective.

The results show that 17no. out of the 19no. windows passed the 25°/45° initial test. 1no. of the remaining 2no. windows achieve VSCs over 27%. The remaining 1no. window is just marginally below the relative VSC target of 0.8; it also attains a VSC of over 20% which is generally deemed satisfactory level of daylight for urban environments, indicating this window will retain good levels of daylight; Furthermore, the associated window is part of a dual aspect room and the second window comply with the 25-degree line test, allowing the room to keep high levels of daylight.

The table below summarises the findings.

Detailed results are presented in Appendix B - Detailed Daylight Results.

Figure 6: 30 Avenue Road.

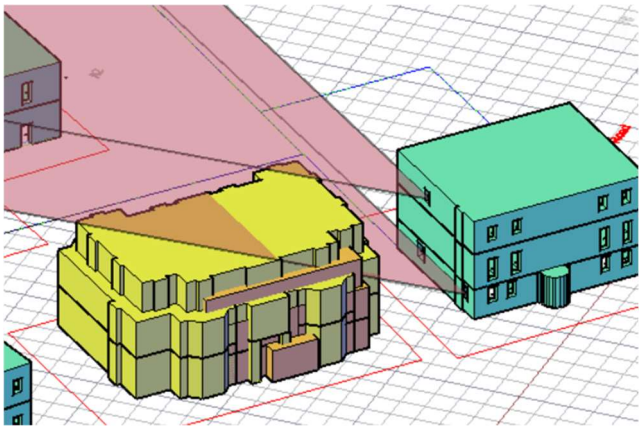

Figure 7: 30 Avenue Road 25-degree plane.

Table 5: Daylight results summary for Henry House.

Number of windows tested	19
Number of windows passing the 25°/45° initial test	17
Number of windows with a VSC higher than 27%	1
Number of windows with a VSC marginally below 0.8 of existing value (>74%) and part of a dual aspect room	1
Number of windows that do not meet any of the above criteria	0

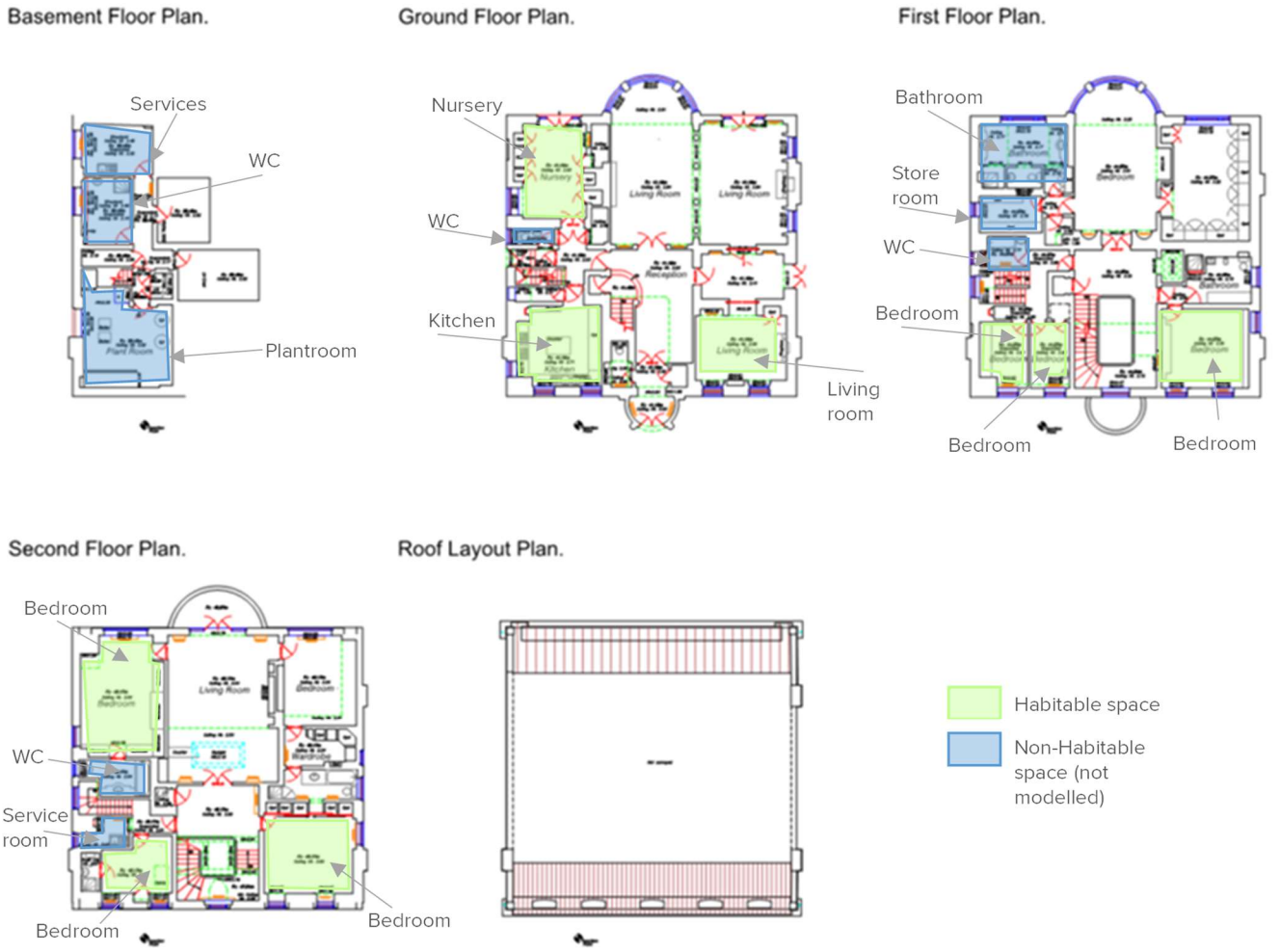

Figure 8: Layouts for 30 Avenue Road. The windows on the left which are facing the proposed development at 32-34 Avenue Road are non-habitable spaces or dual aspect rooms.

SUNLIGHT ASSESSMENT

The analysis indicates that the proposed development is anticipated to be in line with BRE sunlight levels and is unlikely to have a significant impact on neighbouring south facing windows.

The BRE guide states that:

"if a living room of an existing dwelling has a main window facing within 90° of due south, and any part of a new development subtends an angle of more than 25° to the horizontal measured from the centre of the window in a vertical section perpendicular to the window, then the sunlighting of the existing dwelling may be adversely affected"

A total of 38 windows from buildings surrounding the site were highlighted as facing the development and within 90° of due south.

These windows belong to:

- 36 Avenue Road
- Purifier House
- 30 Avenue Road

Included within this assessment.

The analysis indicated that all windows within 90° due south satisfy BRE criteria for sunlight.

The table below shows the results summary. The detailed results can be found in Appendix C - Detailed Sunlight Results.

Overall, the proposed development is not considered to have any notable impact on sunlight access to windows of surrounding developments.

Table 6: Sunlight results summary.

Total number of windows facing within 90° of south	38
Number of south facing windows passing the 25°/45° initial test	26
Number of south facing windows with APSH greater than 25% and WPSH greater than 5%, or of at least 0.8 of their former existing value	10
Number of south facing windows with less than 4% reduction in annual sunlight	1
Number of south facing windows with a VSC marginally below 25% recommended by BRE (>24%) and a relative APSH greater than 0.8	1
Number of windows that do not meet any of the above criteria	0

OVERSHADOWING ASSESSMENT

The analysis indicates that the proposed development is unlikely to have a significant impact on the sunlight received by neighbouring amenity spaces.

A review of the site plan showed that there are 3no. amenity or open spaces in close proximity to the proposed development, as shown in the figure below. A Solar Access Analysis was undertaken on these amenity areas for the full 24 hours on 21 March as set out by the BRE.

The images show that at least 50% of each of the analysed spaces will receive more than 2 hours of sunlight on 21 March under proposed conditions, meeting the BRE requirements for overshadowing.

The proposed development is not considered to have any significant impact on sunlight access to neighbouring amenity and open spaces.

Figure 9: Amenity and open spaces in close proximity to development site.

Figure 10: Overshadowing results for existing and proposed cases in amenity spaces.

Table 7: Detailed overshadowing results for surrounding properties.

Amenity	Area (m^2)	Existing lit area (m^2)	Proposed lit area (m^2)	Proposed lit area (%)	Pr/Ex	BRE result
A1	69.9	67.20	51.93	74%	0.77	Pass
A2	1174.3	1,162.99	1,162.99	99%	1.00	Pass
A3	493.4	483.89	483.79	98%	1.00	Pass

CONCLUSION

The daylight, sunlight and overshadowing analysis indicates that there will not be a significant impact on surrounding properties arising from the proposed development at 32-34 Avenue Road.

DAYLIGHT ASSESSMENT

A total of 49 windows from buildings surrounding the site were highlighted as being in close proximity to, and facing the proposed development.

Daylighting levels for potentially affected windows of surrounding developments by the proposed development at 32-34 Avenue Road were found to be acceptable and meet the BRE criteria.

In summary,

- 34no. out of 49no. windows passed the 25-degree line test;
- 10no. of the remaining 15no. windows achieved VSCs greater than 27%;
- 4no. of the remaining 5no. windows achieved relative VSCs over 0.8 of their former values and the reduction in daylight is unlikely to be noticeable based on the BRE guidelines;
- The remaining 1no. window is just marginally below the relative VSC target of 0.8; it also attains a VSC of over 20% which is generally deemed satisfactory level of daylight for urban environments, indicating this window will retain good levels of daylight; Furthermore, the associated window is part of a dual aspect room and the second window comply with the 25-degree line test, allowing the room to keep high levels of light.

Overall, the development is not anticipated to have any notable impact on the daylight received by neighbouring properties.

SUNLIGHT ASSESSMENT

A total of 38 south facing windows from buildings surrounding the site were assessed for sunlight access.

The analysis indicated that 26no. out of the 38no. windows passed the 25°/45° test. 10no. of the remaining 12no. windows have an APSH greater than 25% & WPSH greater than 5% or of at least 80% of their former value. 1no. of the remaining 2no. windows presents no more than 4% reduction in sunlight received over the whole year (ASHP). The remaining 1no. window is marginally below the ASHP criterion but above the relative 0.8 BRE criteria for annual probable sunlight hours (APSH).

Therefore, the proposed development at 32-34 Avenue Road is not considered to have any notable impact on sunlight access to windows of surrounding developments.

OVERSHADOWING ASSESSMENT

A solar access analysis was undertaken for a total of 3no. amenity spaces surrounding the proposed site for the full 24 hours on 21st of March. All the assessed amenity spaces are predicted to have a minimum of 2 hours of sunlight on 21 March over at least 50% of each assessed amenity space.

The proposed development is therefore not considered to have any significant impact on sunlight access to the amenity spaces surrounding the site.

APPENDIX A – WINDOW AND ROOM REFERENCE

DO NOT SCALE

BACKGROUND DRAWING INFORMATION

FILE NAME	ORIGINATOR NAME	DESCRIPTION NAME	REV	DATE RECD

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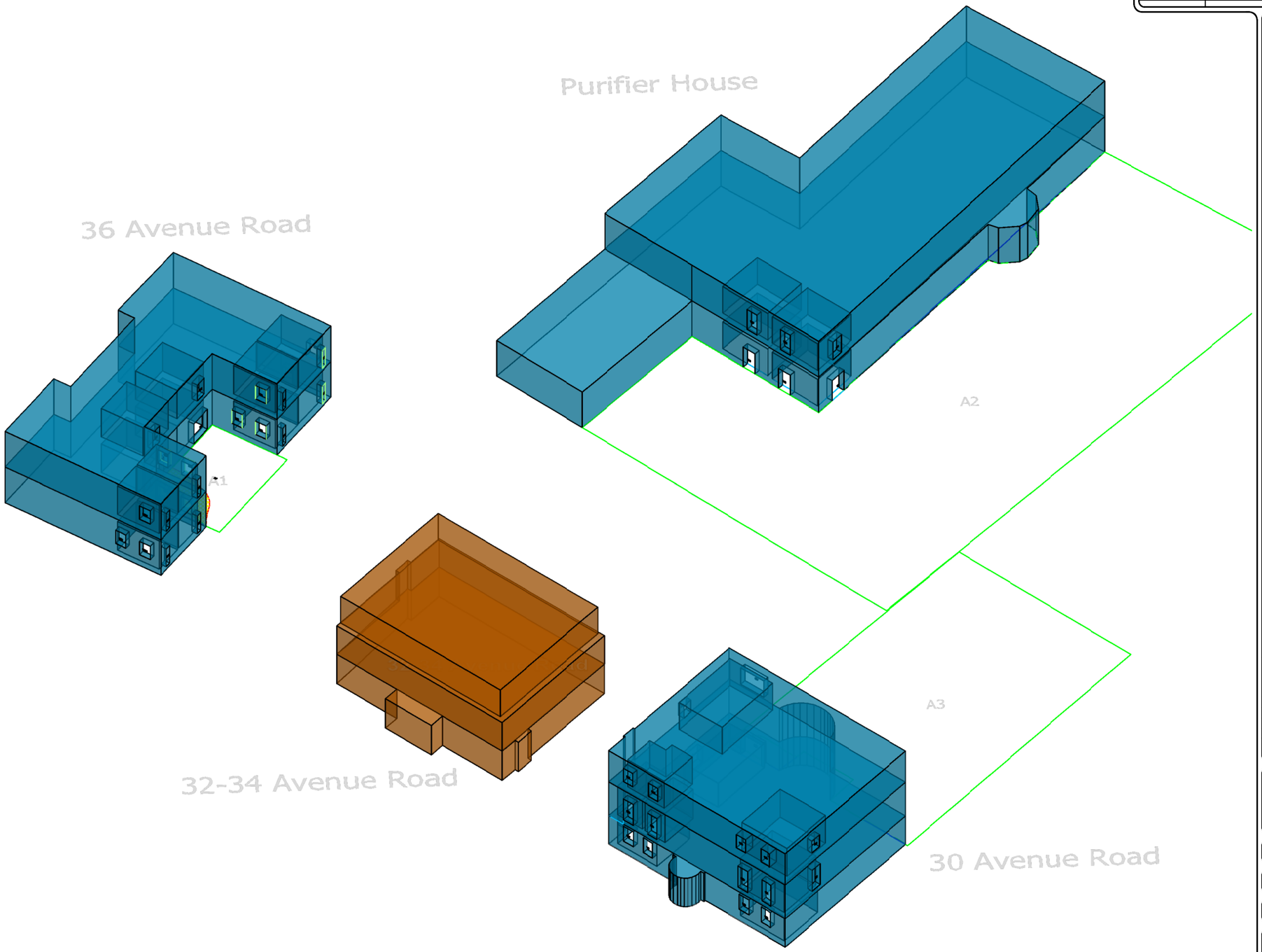

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01	13.04.22	Existing model	AM	KM

ISSUE TYPE

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Title
Existing model

Scale@A3	Drawn	Checked	Date
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Drawing Number
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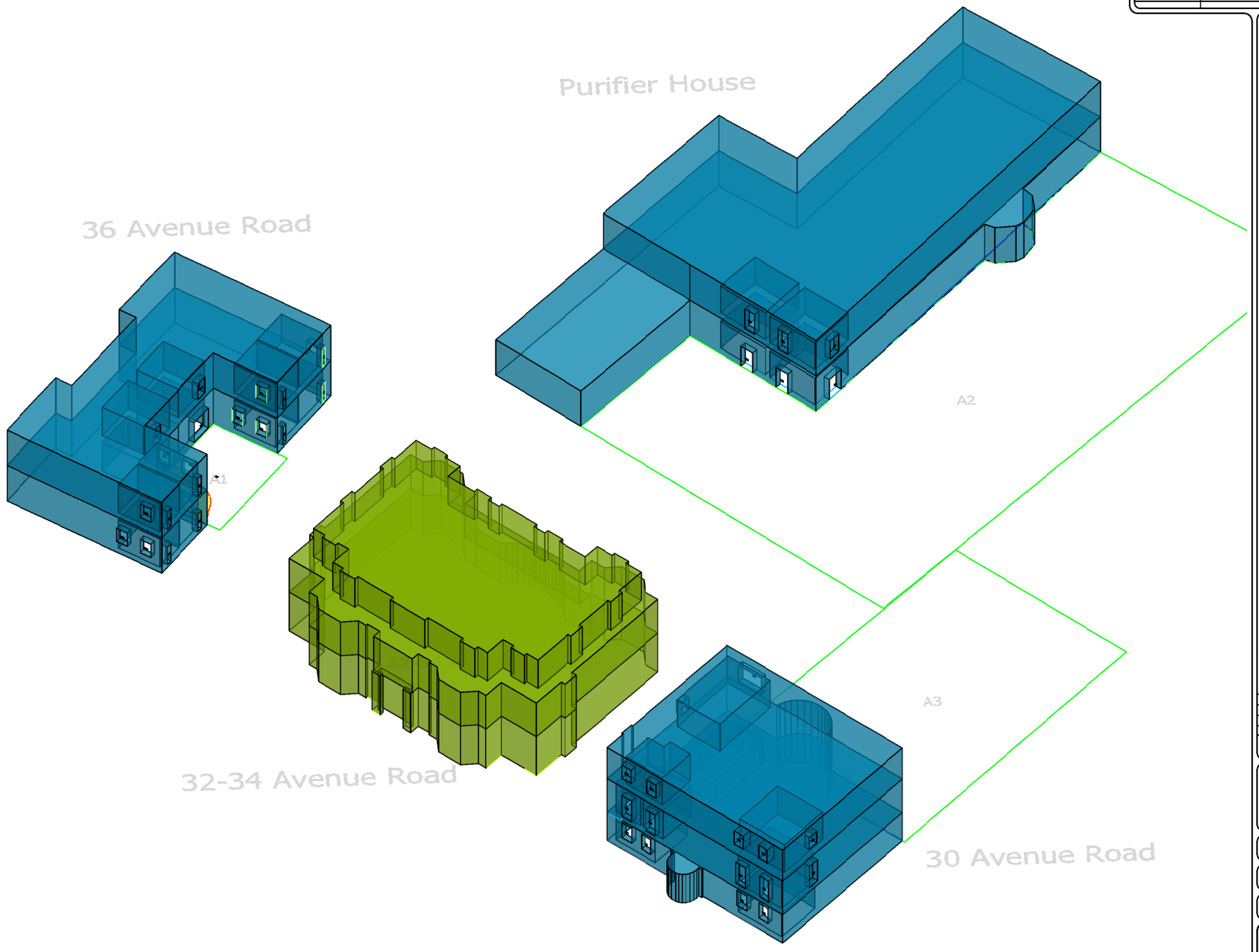

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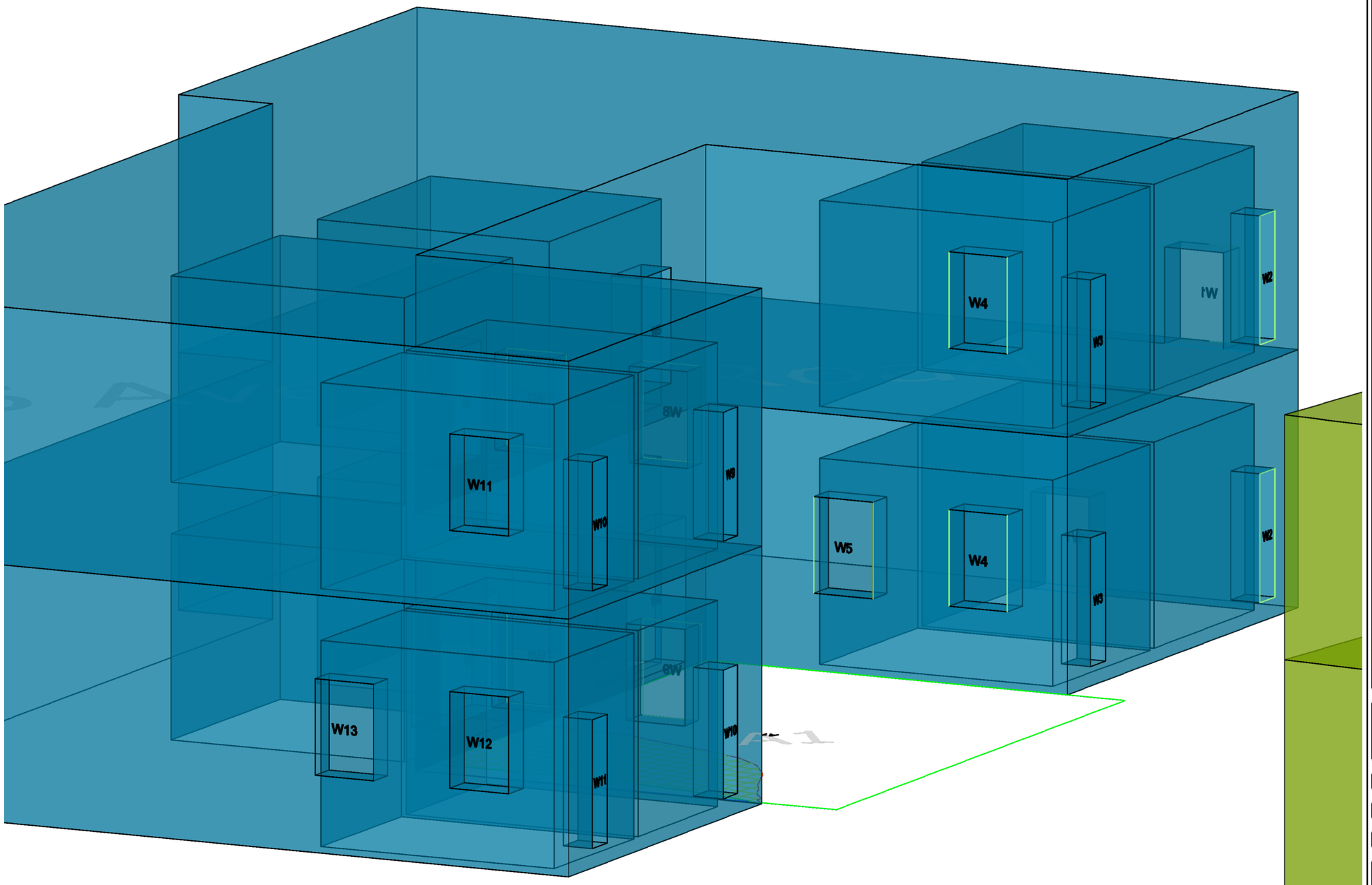

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Project
32-34 Avenue Road

Title
Windows layout
36 Avenue Road

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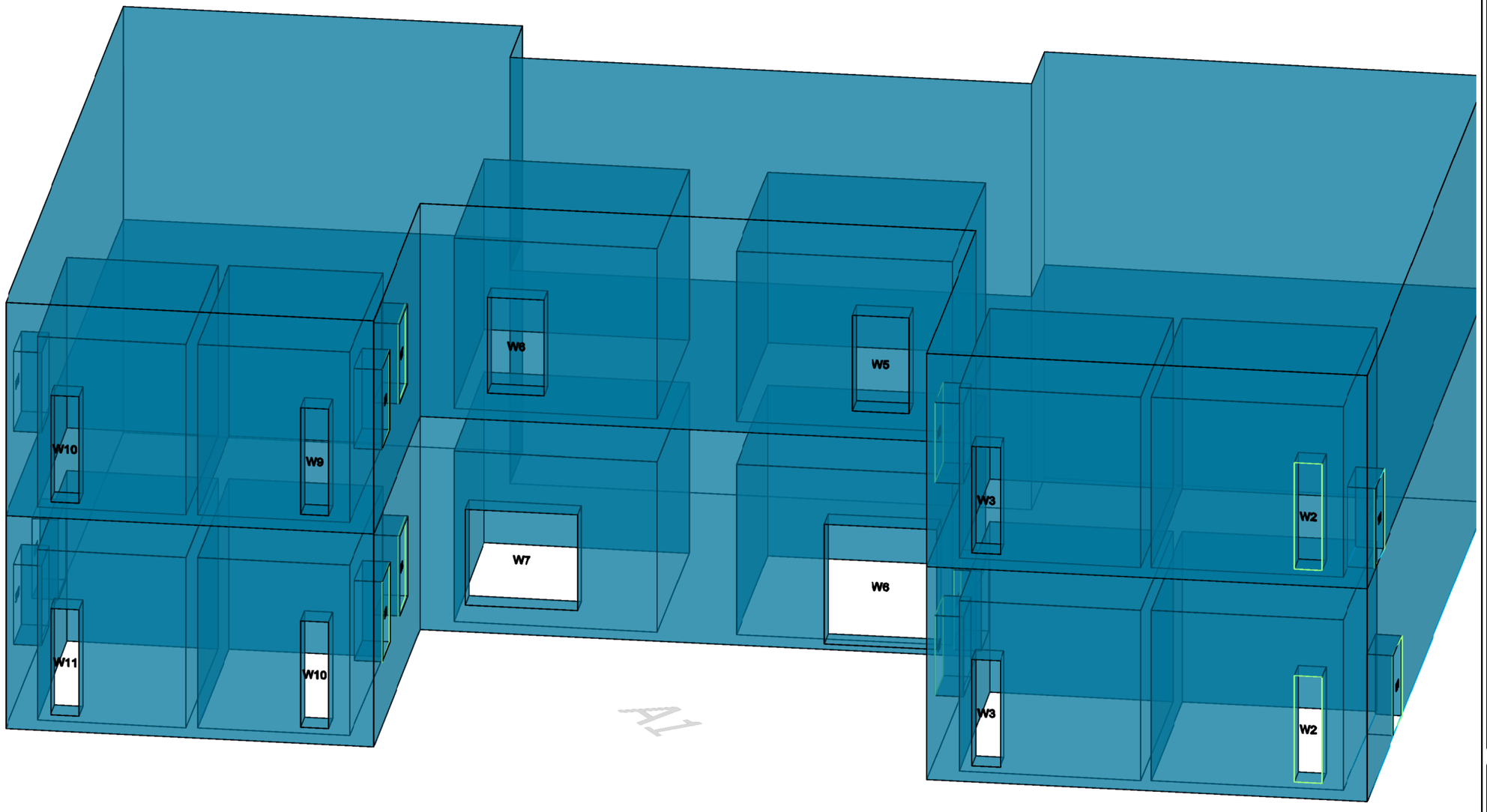

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Architect: XCO2

Project: 32-34 Avenue Road

Title: Windows layout
36 Avenue Road

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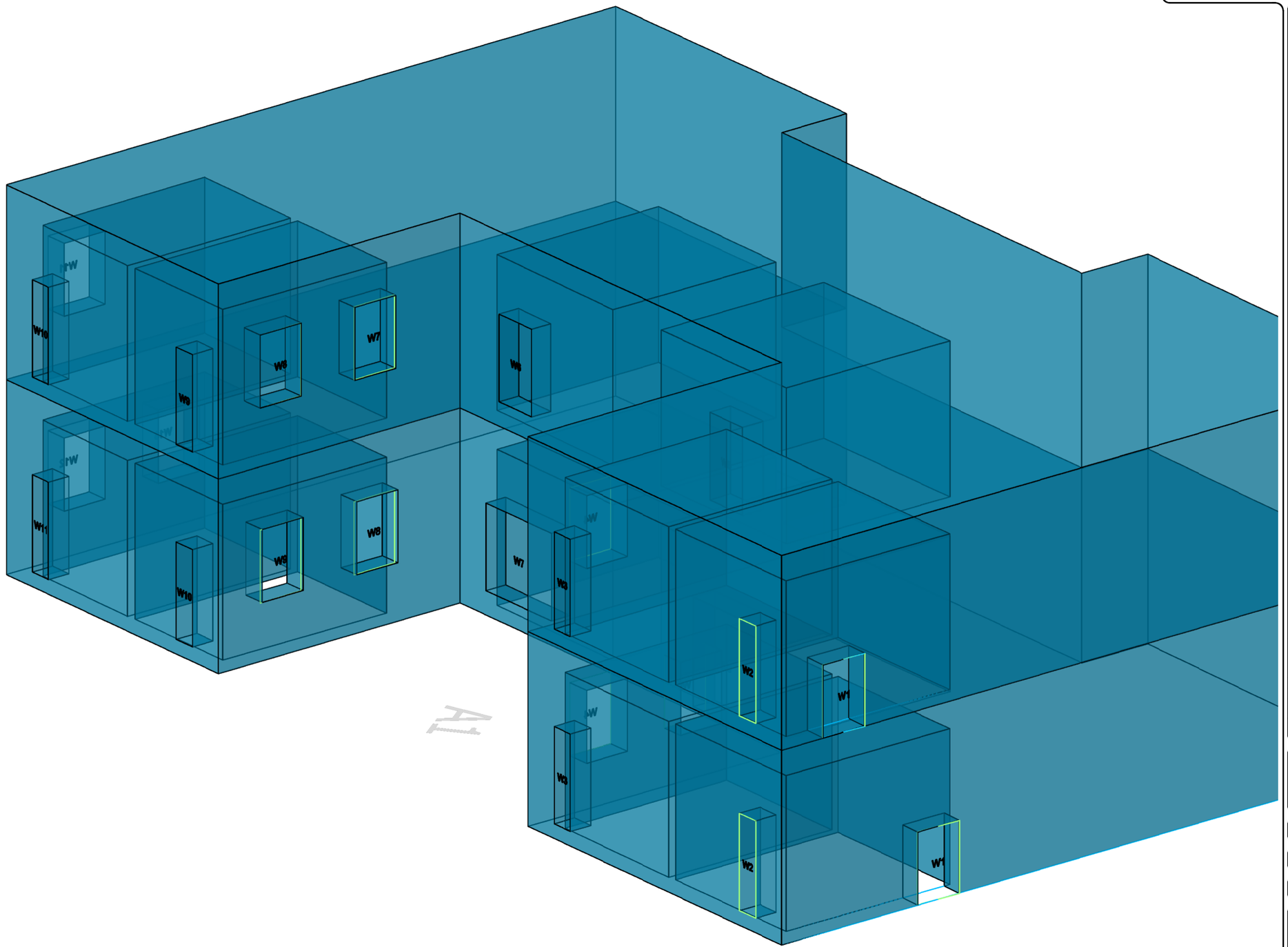

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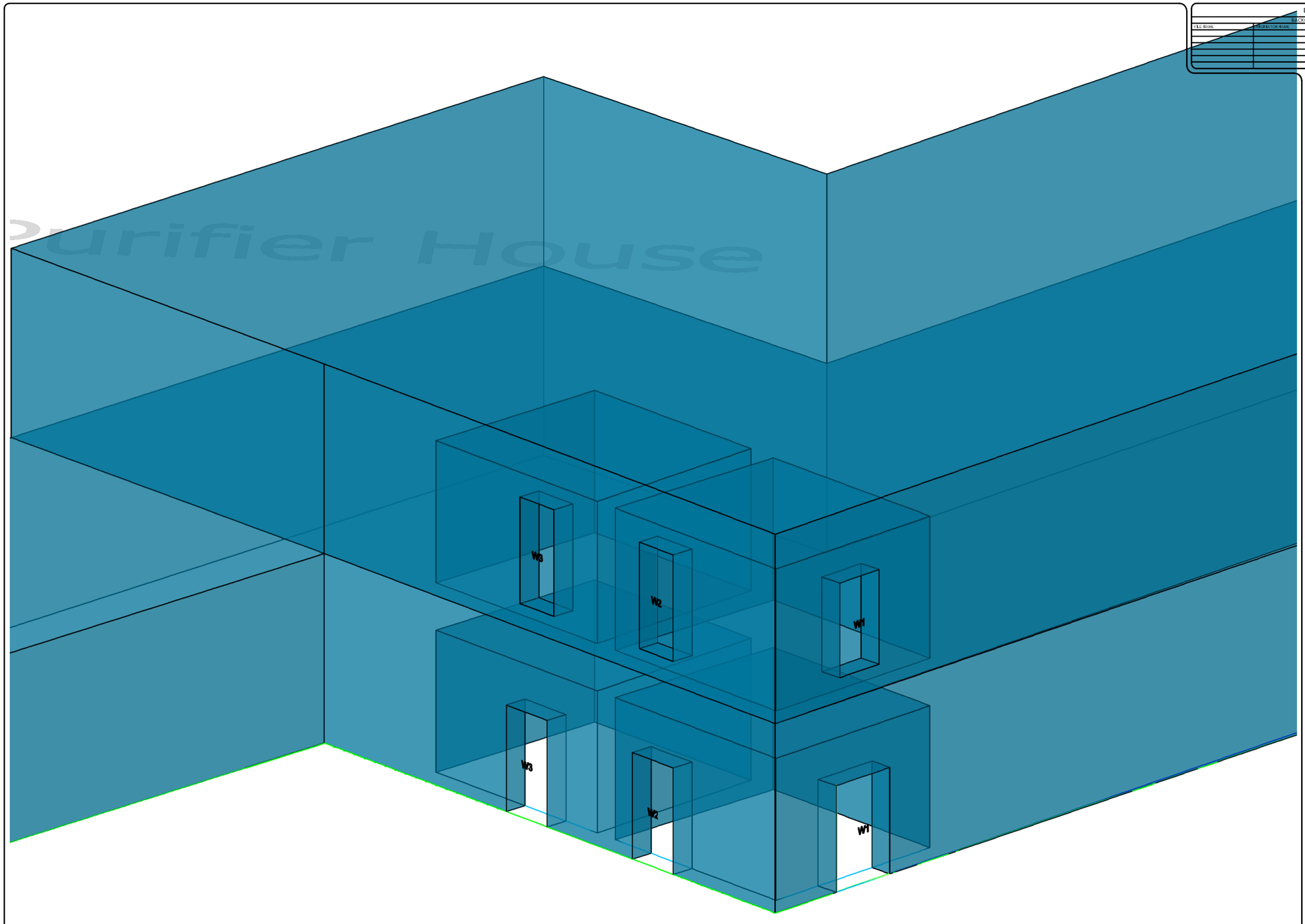

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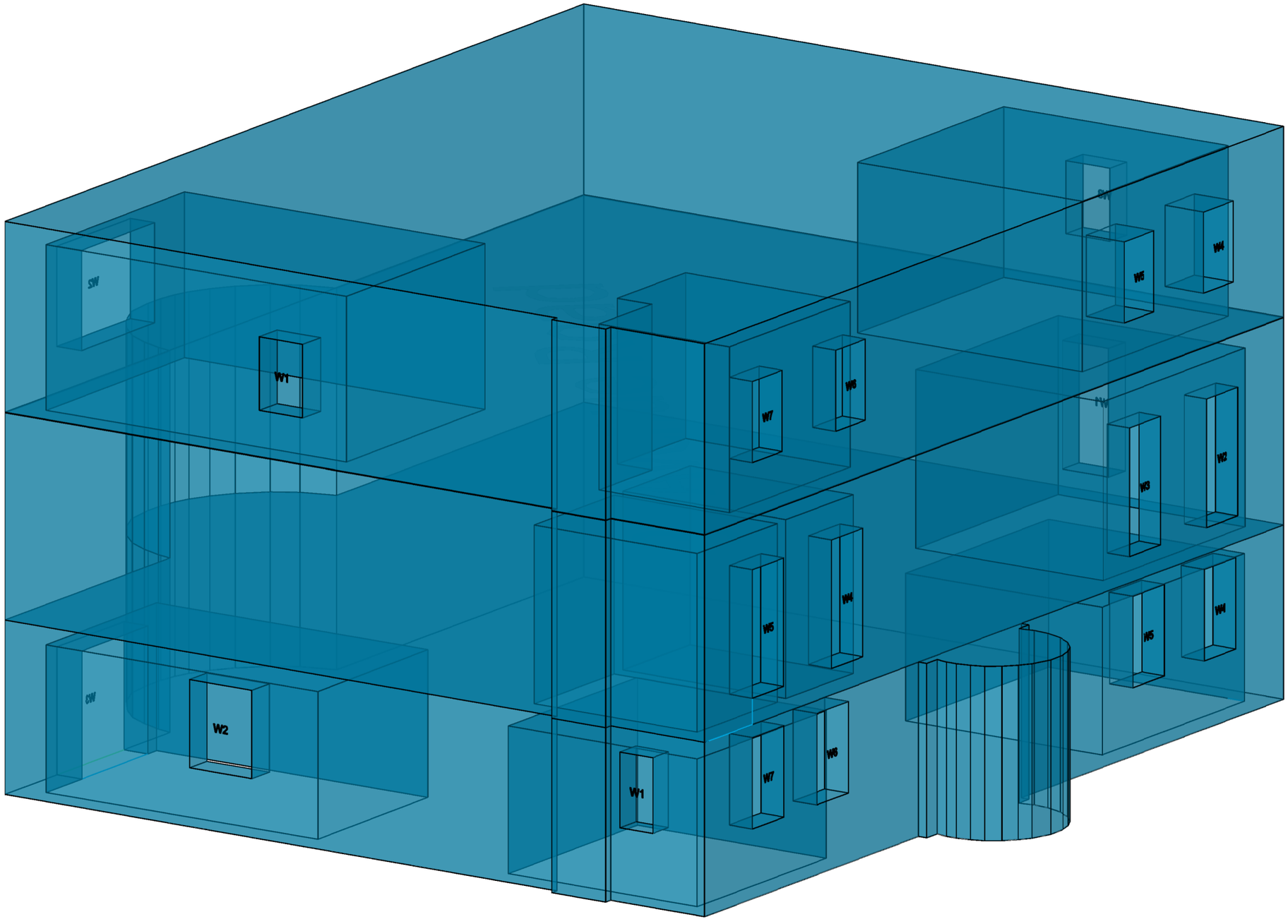

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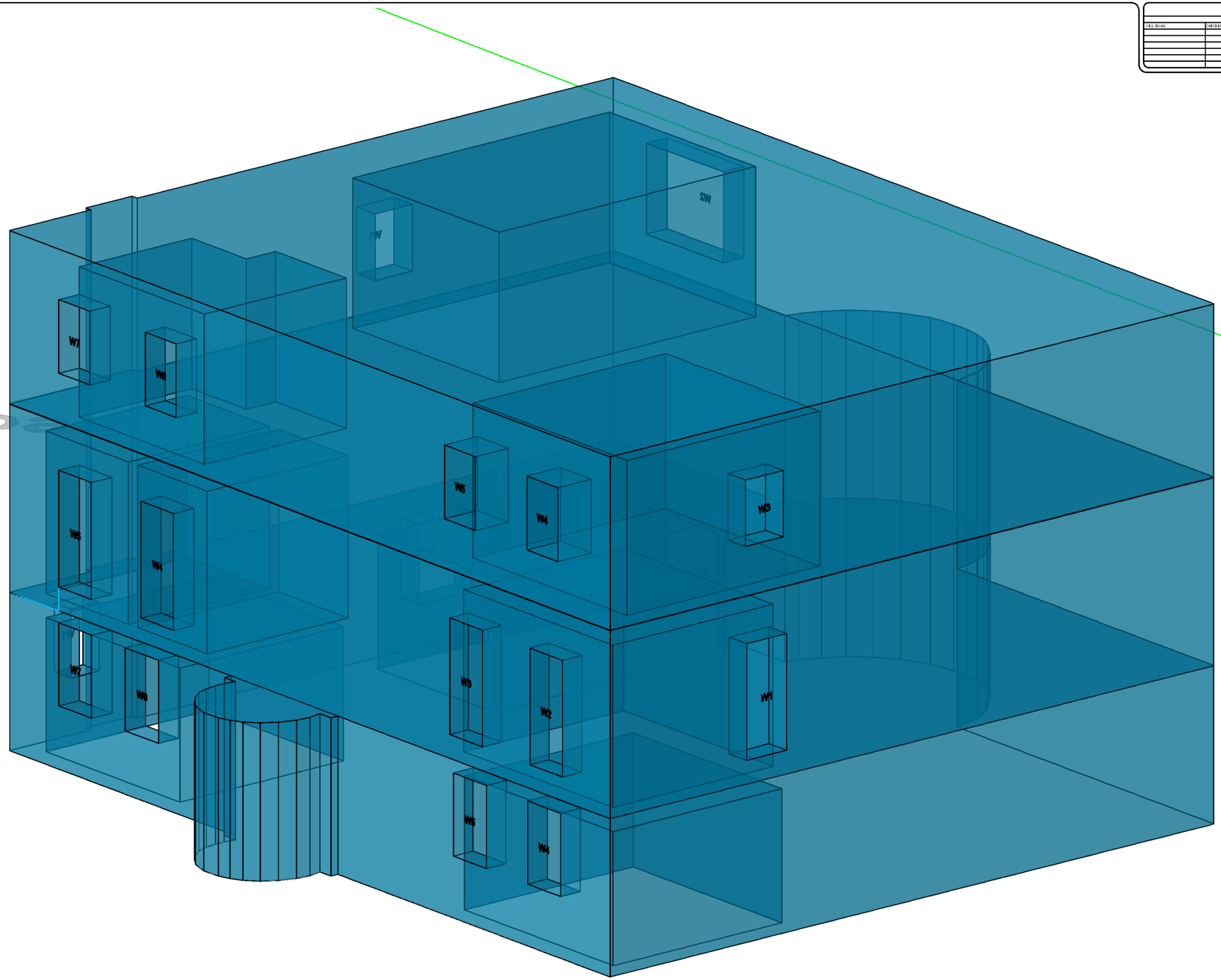

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Revision
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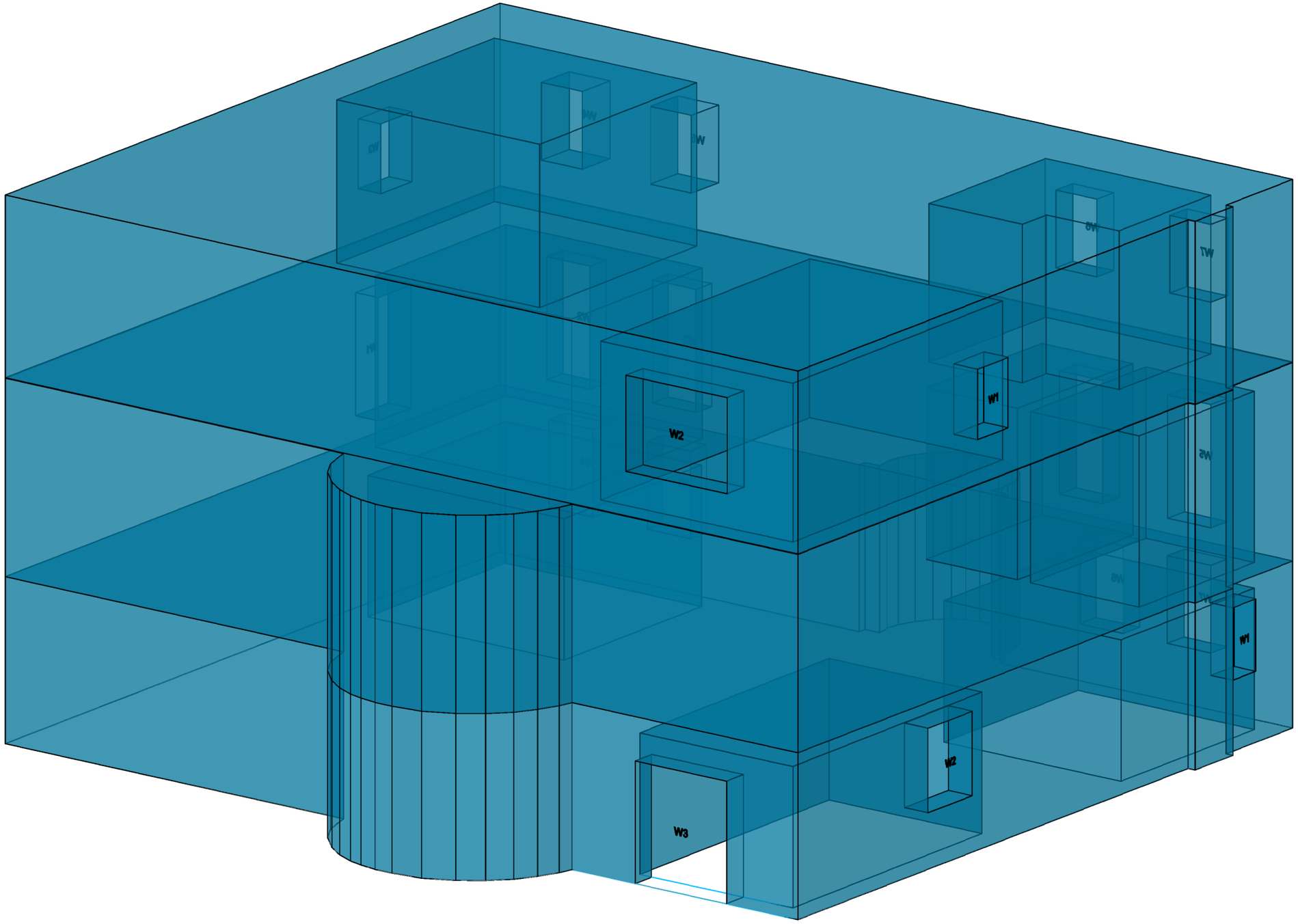

DO NOT SCALE

BACKGROUND DRAWING INFORMATION

FILE NAME	ORIGINATOR NAME	DESCRIPTION NAME	REV	DATE RECD

Notes

Rev	Date	Description	Chk'd	Appr
01	13.04.22	30_Avenue_Road	AM	KM

ISSUE TYPE

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For Private Client

Architect
XCO2

Project
32-34 Avenue Road

Title
Windows layout
30 Avenue Road

Scale@A3	Drawn	Checked	Date
N.T.S	AM	KM	13.04.22

Drawing Number
9.734_32-34 Avenue Road

Revision
1

APPENDIX B - DETAILED DAYLIGHT RESULTS

Building	Floor	Window no.	25-degree plane test	VSC tests			Comments
				Proposed VSC 27%?	Existing VSC (%)	Relative VSC >0.8?	
36 Avenue Road	Ground	W1	Further testing required	37.6%	-	-	Above BRE criteria
36 Avenue Road	Ground	W2	Further testing required	33.2%	-	-	Above BRE criteria
36 Avenue Road	Ground	W3	Further testing required	31.6%	-	-	Above BRE criteria
36 Avenue Road	Ground	W4	Pass	-	-	-	Above BRE criteria
36 Avenue Road	Ground	W5	Pass	-	-	-	Above BRE criteria
36 Avenue Road	Ground	W6	Further testing required	18.4%	21.3%	0.86	Above BRE criteria
36 Avenue Road	Ground	W7	Further testing required	18.8%	21.9%	0.86	Above BRE criteria
36 Avenue Road	Ground	W8	Pass	-	-	-	Above BRE criteria
36 Avenue Road	Ground	W9	Pass	-	-	-	Above BRE criteria
36 Avenue Road	Ground	W10	Further testing required	28.2%	-	-	Above BRE criteria
36 Avenue Road	Ground	W11	Further testing required	29.6%	-	-	Above BRE criteria
36 Avenue Road	Ground	W12	Pass	-	-	-	Above BRE criteria
36 Avenue Road	Ground	W13	Pass	-	-	-	Above BRE criteria
36 Avenue Road	First	W1	Pass	-	-	-	Above BRE criteria
36 Avenue Road	First	W2	Further testing required	36.4%	-	-	Above BRE criteria
36 Avenue Road	First	W3	Further testing required	35.2%	-	-	Above BRE criteria

Building	Floor	Window no.	25-degree plane test	VSC tests			Comments
				Proposed VSC 27%?	Existing VSC (%)	Relative VSC >0.8?	
36 Avenue Road	First	W4	Pass	-	-	-	Above BRE criteria
36 Avenue Road	First	W5	Further testing required	25.9%	27.6%	0.94	Above BRE criteria
36 Avenue Road	First	W6	Further testing required	25.8%	27.8%	0.93	Above BRE criteria
36 Avenue Road	First	W7	Pass	-	-	-	Above BRE criteria
36 Avenue Road	First	W8	Pass	-	-	-	Above BRE criteria
36 Avenue Road	First	W9	Further testing required	33.0%	-	-	Above BRE criteria
36 Avenue Road	First	W10	Further testing required	33.8%	-	-	Above BRE criteria
36 Avenue Road	First	W11	Pass	-	-	-	Above BRE criteria
Purifier House	Ground	W1	Pass	-	-	-	Above BRE criteria
Purifier House	Ground	W2	Pass	-	-	-	Above BRE criteria
Purifier House	Ground	W3	Pass	-	-	-	Above BRE criteria
Purifier House	First	W1	Pass	-	-	-	Above BRE criteria
Purifier House	First	W2	Pass	-	-	-	Above BRE criteria
Purifier House	First	W3	Pass	-	-	-	Above BRE criteria
30 Avenue Road	Ground	W1	Further testing required	27.0%	-	-	Above BRE criteria
30 Avenue Road	Ground	W2	Further testing required	22.2%	30.0%	0.74	VSC exceeds 20% and dual aspect room
30 Avenue Road	Ground	W3	Pass	-	-	-	Above BRE criteria
30 Avenue Road	Ground	W4	Pass	-	-	-	Above BRE criteria

Building	Floor	Window no.	25-degree plane test	VSC tests			Comments
				Proposed VSC 27%?	Existing VSC (%)	Relative VSC >0.8?	
30 Avenue Road	Ground	W5	Pass	-	-	-	Above BRE criteria
30 Avenue Road	Ground	W6	Pass	-	-	-	Above BRE criteria
30 Avenue Road	Ground	W7	Pass	-	-	-	Above BRE criteria
30 Avenue Road	First	W1	Pass	-	-	-	Above BRE criteria
30 Avenue Road	First	W2	Pass	-	-	-	Above BRE criteria
30 Avenue Road	First	W3	Pass	-	-	-	Above BRE criteria
30 Avenue Road	First	W4	Pass	-	-	-	Above BRE criteria
30 Avenue Road	First	W5	Pass	-	-	-	Above BRE criteria
30 Avenue Road	Second	W1	Pass	-	-	-	Above BRE criteria
30 Avenue Road	Second	W2	Pass	-	-	-	Above BRE criteria
30 Avenue Road	Second	W3	Pass	-	-	-	Above BRE criteria
30 Avenue Road	Second	W4	Pass	-	-	-	Above BRE criteria
30 Avenue Road	Second	W5	Pass	-	-	-	Above BRE criteria
30 Avenue Road	Second	W6	Pass	-	-	-	Above BRE criteria
30 Avenue Road	Second	W7	Pass	-	-	-	Above BRE criteria

APPENDIX C - DETAILED SUNLIGHT RESULTS

Building	Floor	Window no.	25-degree plane test	APSH test			WPSH test			Total reduction <4%	Comments
				Proposed APSH >25%?	Existing APSH (%)	Relative APSH >0.8?	Proposed WPSH >5%?	Existing WPSH (%)	Relative WPSH >0.8?		
36 Avenue Road	Ground	W2	Further testing required	61.0%	-	-	17.0%	-	-	-	Above BRE criteria
36 Avenue Road	Ground	W3	Further testing required	58.0%	-	-	15.0%	-	-	-	Above BRE criteria
36 Avenue Road	Ground	W4	Pass	-	-	-	-	-	-	-	Above BRE criteria
36 Avenue Road	Ground	W5	Pass	-	-	-	-	-	-	-	Above BRE criteria
36 Avenue Road	Ground	W6	Further testing required	40.0%	-	-	9.0%	-	-	-	Above BRE criteria
36 Avenue Road	Ground	W7	Further testing required	24.0%	29.0%	0.83	0.0%	4.0%	0.00	5.0%	VSC marginally below 25% and a relative APSH above BRE criteria
36 Avenue Road	Ground	W10	Further testing required	52.0%	-	-	17.0%	-	-	-	Above BRE criteria
36 Avenue Road	Ground	W11	Further testing required	51.0%	-	-	19.0%	-	-	-	Above BRE criteria

DAYLIGHT, SUNLIGHT & OVERSHADOWING

Building	Floor	Window no.	25-degree plane test	APSH test			WPSH test			Total reduction <4%	Comments
				Proposed APSH >25%?	Existing APSH (%)	Relative APSH >0.8?	Proposed WPSH >5%?	Existing WPSH (%)	Relative WPSH >0.8?		
36 Avenue Road	Ground	W12	Pass	-	-	-	-	-	-	-	Above BRE criteria
36 Avenue Road	Ground	W13	Pass	-	-	-	-	-	-	-	Above BRE criteria
36 Avenue Road	First	W2	Further testing required	65.0%	-	-	20.0%	-	-	-	Above BRE criteria
36 Avenue Road	First	W3	Further testing required	63.0%	-	-	18.0%	-	-	-	Above BRE criteria
36 Avenue Road	First	W4	Pass	-	-	-	-	-	-	-	Above BRE criteria
36 Avenue Road	First	W5	Further testing required	55.0%	-	-	21.0%	-	-	-	Above BRE criteria
36 Avenue Road	First	W6	Further testing required	38.0%	-	-	2.0%	4.0%	0.50	2.0%	Above BRE criteria
36 Avenue Road	First	W9	Further testing required	61.0%	-	-	18.0%	-	-	-	Above BRE criteria
36 Avenue Road	First	W10	Further testing required	63.0%	-	-	20.0%	-	-	-	Above BRE criteria
36 Avenue Road	First	W11	Pass	-	-	-	-	-	-	-	Above BRE criteria
Purifier House	Ground	W1	Pass	-	-	-	-	-	-	-	Above BRE criteria
Purifier House	Ground	W2	Pass	-	-	-	-	-	-	-	Above BRE criteria

DAYLIGHT, SUNLIGHT & OVERSHADOWING

Building	Floor	Window no.	25-degree plane test	APSH test			WPSH test			Total reduction <4%	Comments
				Proposed APSH >25%?	Existing APSH (%)	Relative APSH >0.8?	Proposed WPSH >5%?	Existing WPSH (%)	Relative WPSH >0.8?		
Purifier House	Ground	W3	Pass	-	-	-	-	-	-	-	Above BRE criteria
Purifier House	First	W1	Pass	-	-	-	-	-	-	-	Above BRE criteria
Purifier House	First	W2	Pass	-	-	-	-	-	-	-	Above BRE criteria
Purifier House	First	W3	Pass	-	-	-	-	-	-	-	Above BRE criteria
30 Avenue Road	Ground	W4	Pass	-	-	-	-	-	-	-	Above BRE criteria
30 Avenue Road	Ground	W5	Pass	-	-	-	-	-	-	-	Above BRE criteria
30 Avenue Road	Ground	W6	Pass	-	-	-	-	-	-	-	Above BRE criteria
30 Avenue Road	Ground	W7	Pass	-	-	-	-	-	-	-	Above BRE criteria
30 Avenue Road	First	W1	Pass	-	-	-	-	-	-	-	Above BRE criteria
30 Avenue Road	First	W2	Pass	-	-	-	-	-	-	-	Above BRE criteria
30 Avenue Road	First	W3	Pass	-	-	-	-	-	-	-	Above BRE criteria
30 Avenue Road	First	W4	Pass	-	-	-	-	-	-	-	Above BRE criteria

DAYLIGHT, SUNLIGHT & OVERSHADOWING

Building	Floor	Window no.	25-degree plane test	APSH test			WPSH test			Total reduction <4%	Comments
				Proposed APSH >25%?	Existing APSH (%)	Relative APSH >0.8?	Proposed WPSH >5%?	Existing WPSH (%)	Relative WPSH >0.8?		
30 Avenue Road	First	W5	Pass	-	-	-	-	-	-	-	Above BRE criteria
30 Avenue Road	Second	W3	Pass	-	-	-	-	-	-	-	Above BRE criteria
30 Avenue Road	Second	W4	Pass	-	-	-	-	-	-	-	Above BRE criteria
30 Avenue Road	Second	W5	Pass	-	-	-	-	-	-	-	Above BRE criteria
30 Avenue Road	Second	W6	Pass	-	-	-	-	-	-	-	Above BRE criteria
30 Avenue Road	Second	W7	Pass	-	-	-	-	-	-	-	Above BRE criteria

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