

FLOOD RISK ASSESSMENT

NPPF & PPG compliant
Havering Core Strategy Policies
PPG Update compliant
London Plan SI.12 and SI.13 compliant

Upper floor conversion

Critical: safe operation in all flood scenarios

Havering drainage officers enforce the source control / SUDS hierarchy for
all projects based on objections to various schemes

at

102-106 South Street, Romford, RM1 1RX

May 2025

ARK Environmental Consultancy Ltd

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If this report has been released electronically, the appendices referred to herein can be found in the annexed zip folder/s as .pdf or .dwg files. If this report has been released in hard copy the appendices will be bound into the back of this report. Plans may be annexed separately as A1 or A0 copies where a bound-in A3 copy is not appropriate.

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1.0 Scope

This report contains the details of a Flood Risk Assessment carried out by Ark Environmental Consulting Limited (“ARK Ltd”) for 102 - 106 South Street, Romford, RM1 1RX, henceforth referred to as “the site” in this report.

This report has been prepared for Ian Stephenson Ltd and must not be relied upon by any other party without the explicit written permission of ARK Ltd.

All parties to this report do not intend any of the terms of the Contracts (Right of Third Parties Act 1999) to apply to this report. Please note this report does not purport to provide definitive legal advice nor can it be used to demonstrate that the site will never flood in the future. The Executive Summary contains an overview of key findings and conclusions. However, no reliance should be placed on the Executive Summary until the whole of the report has been read. Other sections of the report may contain information which puts into context the findings noted within the Executive Summary.

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2.0 Executive Summary

This FRA has been carried out in accordance with the National Planning Policy Framework (NPPF) & PPG. It is to be used to assist the Local Planning Authority (LPA) and Environment Agency (EA) when considering the flooding issues of the proposed development as part of a planning application.

The proposed development comprises internal changes and change of use at upper floors to residential to an existing mixed used building (3rd floor is already residential); no change to site operation or sensitivity.

This is categorized as a “More Vulnerable” landuse in accordance with the NPPF classifications; the site is located wholly in EA FZ2 / FZ3.

The Exception Test is considered passed by this assessment based on the data and scheme, site and scheme specifically.

No additional flood levels (eg: new climate change allowances) would alter the assessment of recommendations of the report given it is an conversion.

Site is within council and EA surface water risk area; it is not possible to refuse or object to the scheme on the grounds of the surface water hazard because it is an existing dwelling and the scheme results in betterment regardless.

No additional formal SUDS are considered necessary to still be compliant with policy.

Given the residual risk flood setting, the level, extent and depth of flooding on the site can be managed in terms of continued refuge for all site users for the lifetime of the development.

Based on the likely flooding risk, it is considered that the proposed development can be constructed and operated safely in flood risk terms, without increasing flood risk elsewhere and is therefore appropriate development in accordance with the NPPF.

3.0 Introduction

The FRA combined a desktop study, review of available information, consultations and an assessment of all sources of flooding posed to and from the site and proposed development, in accordance with National Planning Policy Framework (NPPF). Appropriate flood mitigation measures were then considered, either as already incorporated within the scheme or recommended for inclusion at detailed design stage. The suitability of the proposed development was also reviewed in the context of the NPPF and the technical guidance accompanying the NPPF.

4.0 Purpose of the Report

This FRA has been carried out in accordance with National Planning Policy Framework (NPPF). It is to be used to assist the Local Planning Authority (LPA) and Environment Agency (EA) when considering the flooding issues of the proposed development as part of a planning application.

The report provides the following information:

- An assessment of the flood risk posed to the site based on flood information and mapping provide by the EA and Strategic Flood Risk Assessment (SFRA);
- An assessment of the proposed development in terms of surface water run-off; and
- Proposals for measures to mitigate the flood risks posed to and from the development where appropriate.

5.0 Report Information Sources

The information source used to undertake this FRA has been collected from the following sources:

- EA Website and Data
- British Geological Survey Website and iGeology App
- Havering Council Core Strategy
- Havering (Joint) Borough Council Strategic Flood Risk Assessment
- Havering Joint PFRA / SWMP
- London Plan SI.12 & SI.13
- Internet mapping and searches.

6.0 Overview of British Legislation

6.1 National Planning Policy

The National Planning Policy Framework (NPPF) and PPG supercede all Planning Policy Statements (PPS's) and remaining Planning Policy Guidance (PPG's). Flood risk is retained as a key development consideration.

The Sequential and Exception Tests are retained as part of the NPPF. The accompanying NPPF Technical Guidance also includes Tables 2 and 3 to assist with flood risk vulnerability classifications and development suitability. This report provides the flood risk assessment element of both tests where appropriate. It is the decision of the planning authority as to whether the tests can be fully passed.

6.2 Local Policy

Local Authorities consider flood risk through relevant environmental and climate change policies which enforce the requirements of the NPPF.

The Strategic Flood Risk Assessment (SFRA) is a key source of flood risk specific information for the area. The SFRA provides a more detailed review of flood risks and recommendations for ensuring developments can be constructed and operated safely in accordance with the NPPF. Greater detail of the SFRA is provided in the report.

London Plan SI.12 and SI.13 requirements.

7.0 Site Status and Environmental Setting

7.1 Site Location and Status

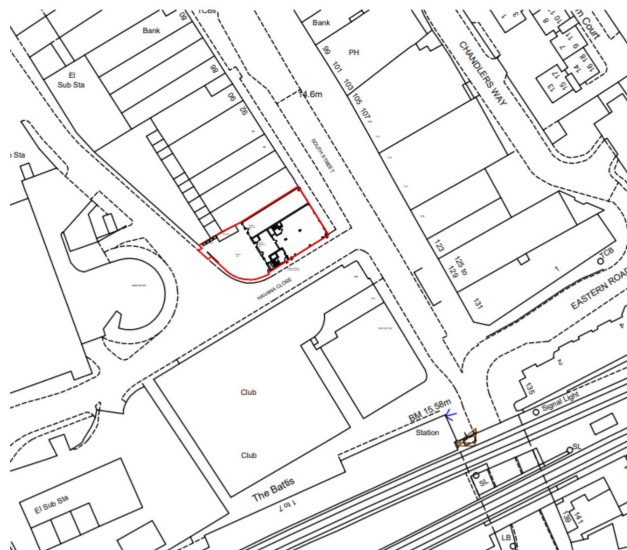
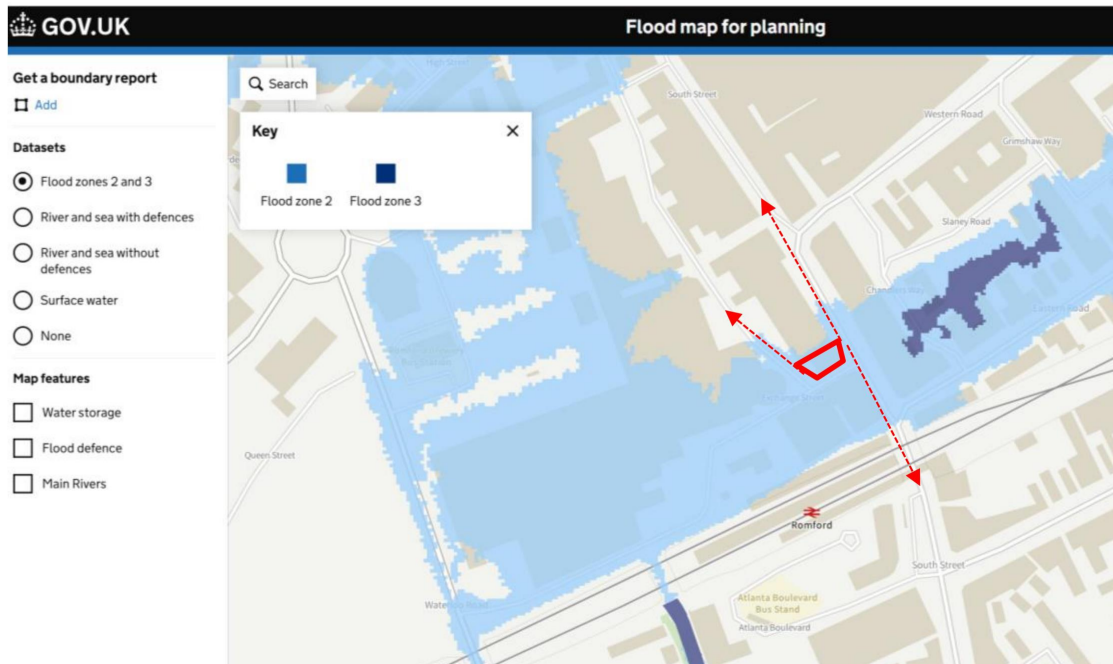
The following description is based on information made available from internet mapping, architects drawings and aerial photography.

The site comprises an existing retail / commercial building with third floor residential. The site is within the edge of EA FZ3 / FZ2 culverted watercourse and the council climate change extents for surface water. It is immediately adjacent to FZ1.

The location plan can be seen in Appendix A.

7.2 Existing Flood Risk Posed to the Site / from Scheme

Flood Sources	Site Status	Comment on flood risk posed to / from the development
Fluvial / Tidal	Site is within the edge of FZ2 / FZ3 culverted watercourse: flooding as per a sewer residual hazard Immediately adjacent to FZ1 Within council climate change extents Not defended area hence no breach extents affect the site	No highly vulnerable uses No flood compensation required for conversion No change to site operations or sensitivity All site users continue to have access to upper floors above the extreme event for the lifetime of the scheme
Groundwater	SFRA indicates site is not in an area of groundwater flooding / incidents.	The proposed development will not increase the risk of groundwater flooding. Low Risk
Artificial Sources	Site is not within extensive general EA Reservoir Flood Warning area: managed and maintained to appropriate standards No other artificial sources with likely flood flowpaths that could reach the site	Low Risk
Surface Water / Sewer Flooding	Site is not located in a Critical Drainage Area but within surface water flood extents from the council and the EA Condition, depth and location of surrounding infrastructure uncertain	Residual hazard: all sleeping to be at first floor and above well above the flood extents Operation is safe in this flood scenario No additional drainage assessment required Low Risk
Climate Change: new allowances	Included in the flood modelling extents	Development will not increase the peak flow and volume of discharge from the site Climate change incorporated in the EA / SFRA modelling Low risk posed to and from the development
Historic Flooding	Included in the EA / council data where appropriate	Site is not in an area of historic flooding based on available data



7.3 Geology & Infiltration

Irrelevant given change of use at 3rd floor.

7.4 SFRA Summary

Where appropriate (eg: groundwater) the SFRA is referenced above. The SFRA does not indicate any other significant sources of flooding.

7.5 Flood Compensation

No new footprint as this is a conversion: no flood compensation is required.

7.6 EA 2025 Surface Water Hazard

- Site is partly in NO hazard in EA high risk scenario
- Site is immediately adjacent to No – Low hazard in all flood scenarios for access / egress
- Property is surrounded by EA medium hazard in the EA LOW risk scenario
 - Patchy 300 – 900mm depths (associated with upper catchment ephemeral drainage area)
- Suitability of residential at the site is not in question and no flood compensation is required
- No mitigation required other than safe flood response management plan

7.7 Existing drainage

The scheme is a conversion.

No additional drainage assessment is required for this flood risk assessment.

8.0 Assessment of Proposed Development

8.1 Proposed Development

The proposed development can be seen in Appendix A. The proposed development comprises:

- Conversion at upper floors to residential
- No change to operation at the site
- No change to sensitivity of the site: remains one dwelling
- No additional formal (heavy engineered) SUDS are considered necessary given scope of the scheme

8.2 Havering & London Plan Drainage Requirements

The scheme comprises a conversion at upper levels.

There is no policy trigger to incorporate additional formal SUDS other than to seek a betterment for all schemes no matter the size.

8.3 Flood Resilience

ONLY if there are works required to the ground floor, the following elements will be undertaken using the most resilient approaches as standard:

- Electrics to be installed top down where feasible
- The new ground floor slab will be concrete in order to minimise damage and reduce the turnaround time for returning the property to full operation after a flood event
- No change to site levels outside of the new footprint
- Waterproofing to be tied in to the existing and proposed ground floor slab as appropriate to reduce the turnaround time for returning the property to full operation after a flood event; details to be provided at detailed design to building regulations requirements
- New waterproofing where feasible will be extended to an appropriate level as high as is feasible, above existing ground levels.
- Plasterboards will be installed in horizontal sheets rather than conventional vertical installation methods to minimise the amount of plasterboard that could be damaged in a flood event
- Wall sockets where possible will be raised to as high (minimum of 450mm above existing ground levels) as is feasible and practicable in order to minimise damage if flood waters inundate the property
- Waterproofing to be incorporated as appropriate; details to be provided at detailed design to building regulations requirements as necessary
- Any wood fixings on ground floor will be robust and/or protected by suitable coatings in order to minimise damage during a flood event

9.0 Flood Response Management

9.1 Evacuation and refuge

A precautionary approach has been taken.

The scheme does not change any operation at the site.

The site is within the edge of FZ2 / FZ3 and is a conversion at upper levels.

All site users have safe refuge.

The site is adjacent to FZ1 and to No – LOW surface water hazard.

In the event of a flood warning: safe refuge at upper levels is appropriate.

Evacuation should be to the access / egress on Havanna Close and immediately north on South Street as the preferred option or south; Havanna Close can be used also in emergency; this places all persons immediately into unrestricted FZ1 / low surface water hazard.

9.2 Flood Risk Vulnerability

According to the NPPF retained Flood Risk Vulnerability Classification, the proposed residential land use would be classified as “More Vulnerable.”

The NPPF also retained Flood Risk Vulnerability and Flood Zone “Compatibility” Classification; this states that a “More Vulnerable” development in FZ2/FZ3 is appropriate but with the need to pass the Exception Test.

The Exception Test is considered passed by this assessment based on the data and scheme, site and scheme specifically.

10.0 Conclusion

The scheme comprises a conversion, no change to site operation or sensitivity.

The site is considered to be generally at a low risk from all sources of flooding except for potential residual surface water flooding in extreme events. The scheme addresses this residual hazard with the appropriate response: flood resilience to a minimum of 900mm height.

- **The scheme results in better protected and flood future-proofed property than existing.**

The proposed development is categorised as “More Vulnerable” in accordance with the NPPF; it is therefore an appropriate type of development in Flood Zone 2 & 3.

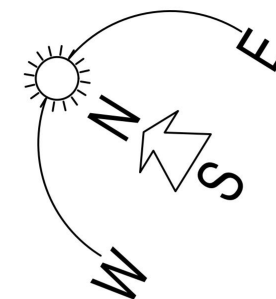
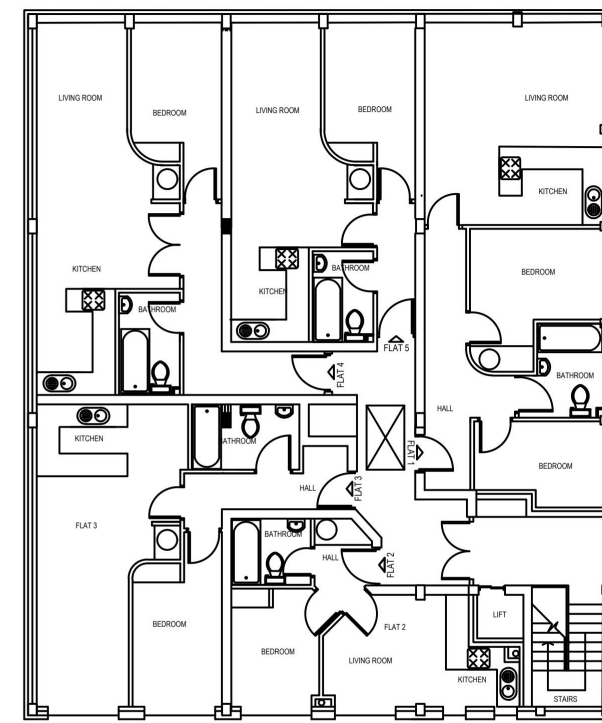
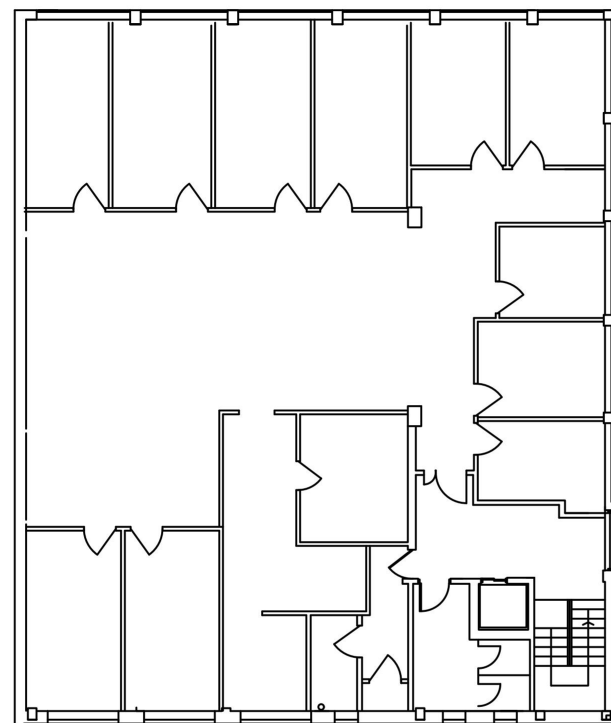
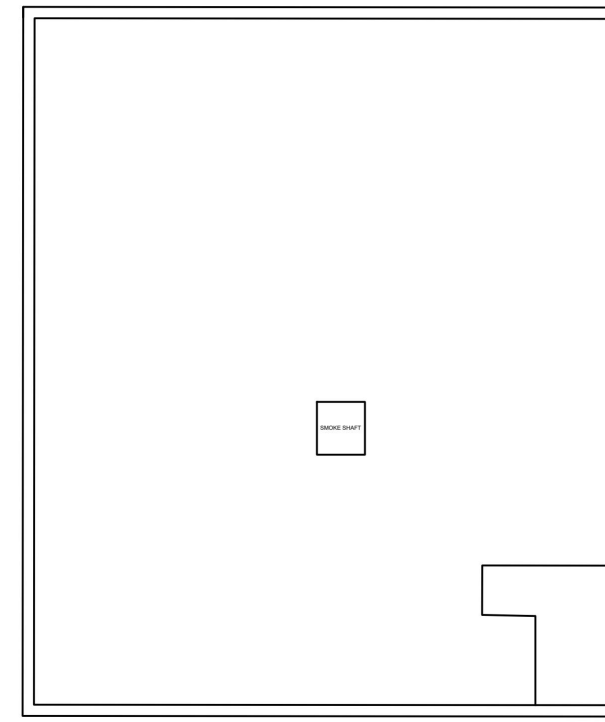
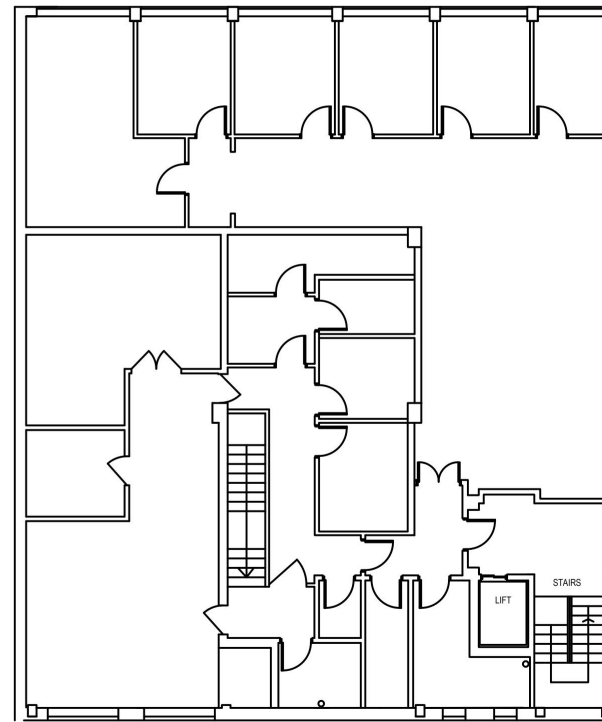
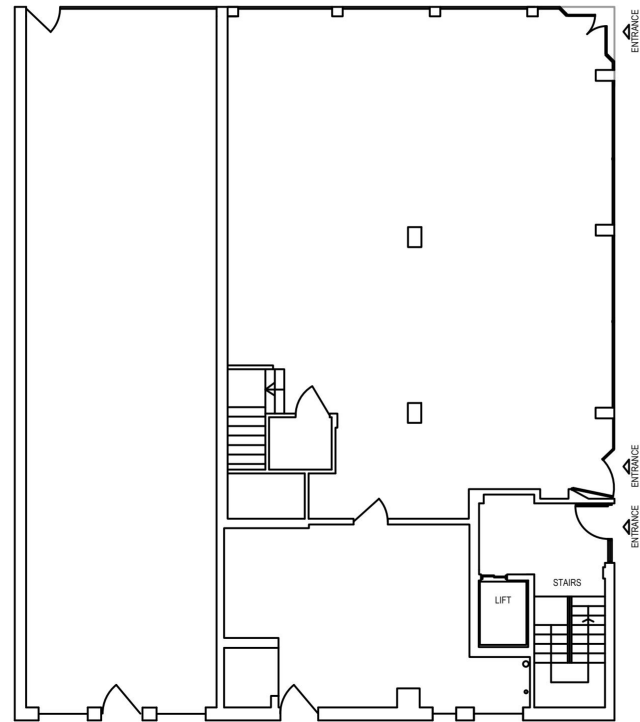
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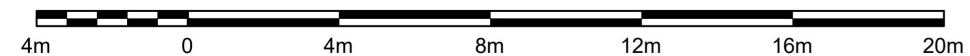
11.0 Appendices

- A. Location Plan & Ex Plans
- B. Proposed Layout & Floor Plans

Appendix A



1:200



Notes

Dimensions shall not be scaled from these drawings in preference to figured dimensions.

Any error or omission shall be reported to the Surveyors before proceeding with the work.

Figured dimensions and levels should be verified by the Contractor on site before construction or manufacture and any discrepancies brought to the attention of the Surveyors.

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Revisions

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102-106 SOUTH STREET
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	Detail
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EXISTING PLANS

Scale

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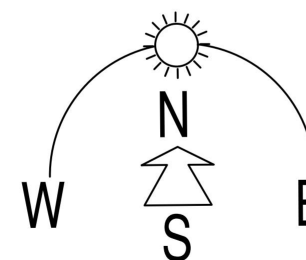
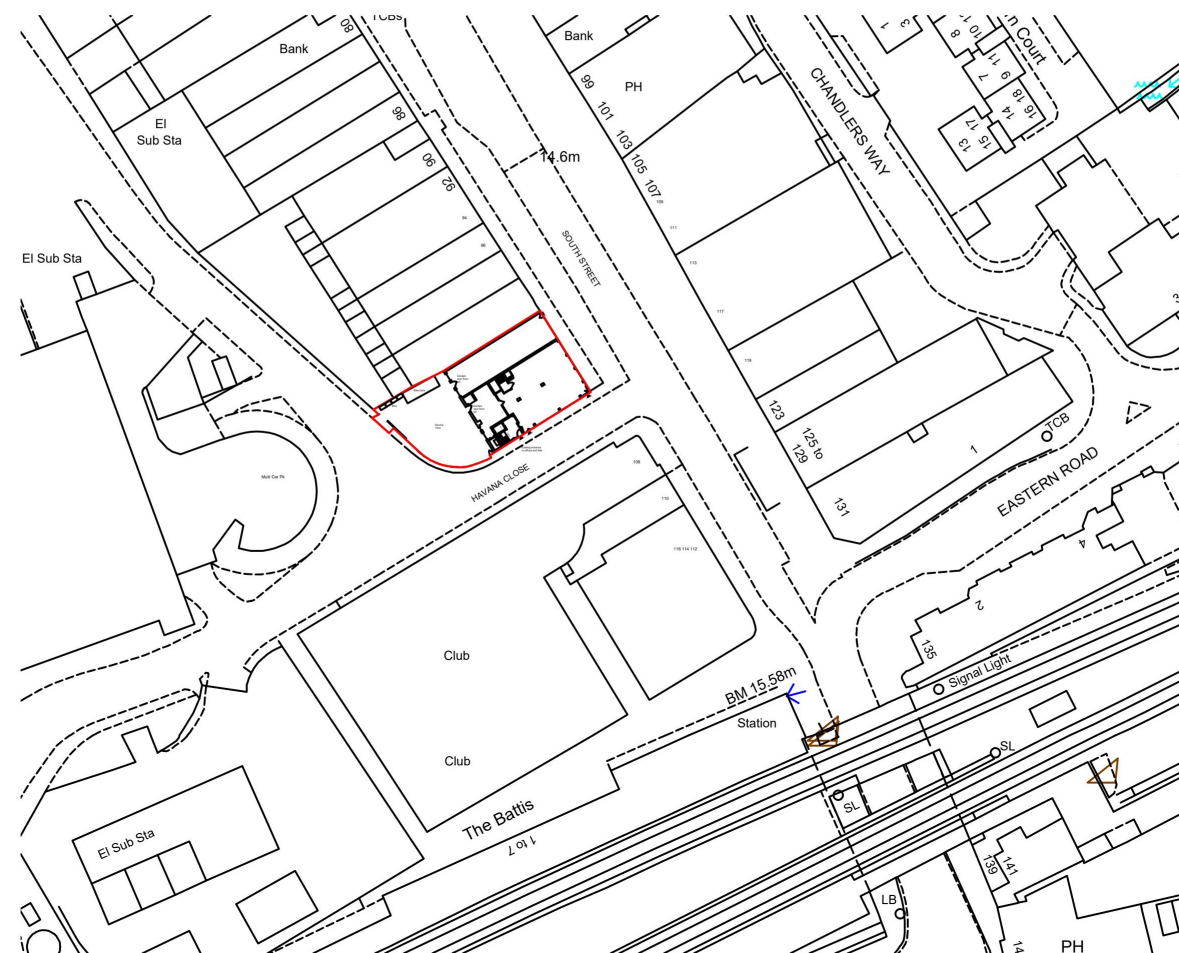
Date
MARCH 2025

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Drawing No. 25/026/02

Revision
A



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102-106 SOUTH STREET
ROMFORD
ESSEX

	Detail

LOCATION AND SITE PLAN

	Scale

AS PLAN AT A3

Date
MARCH 2025

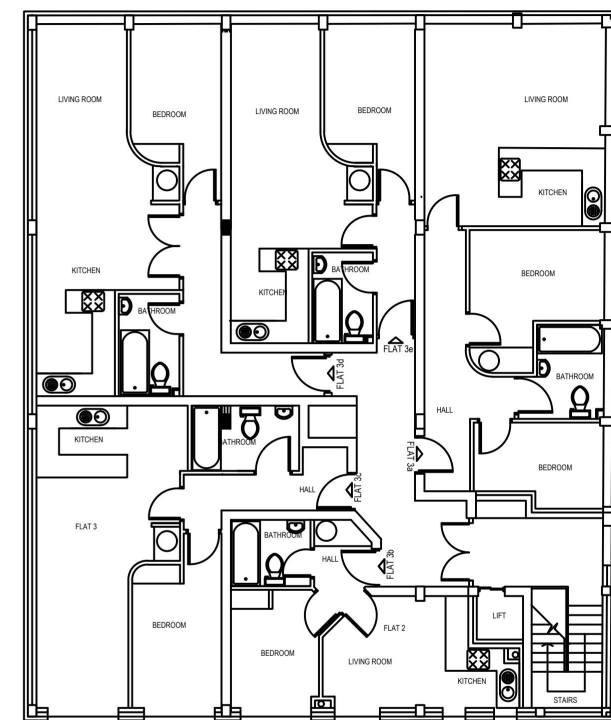
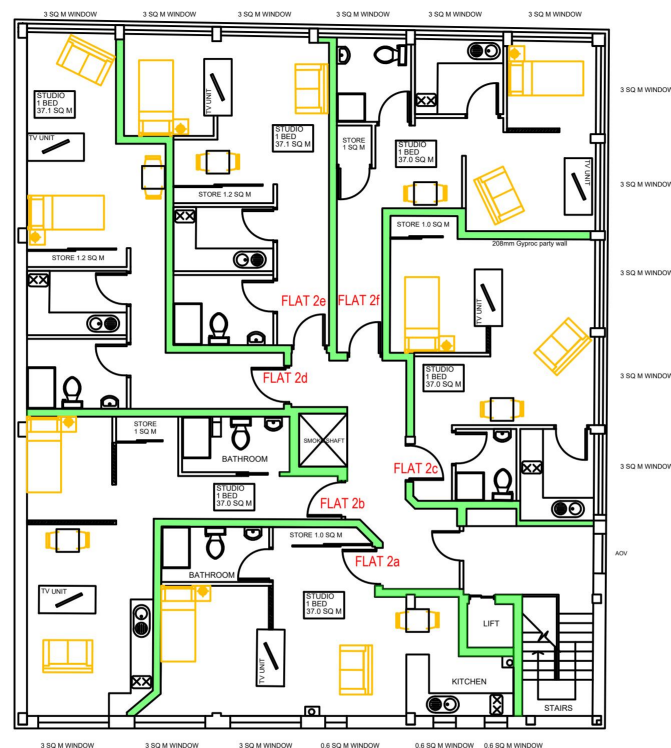
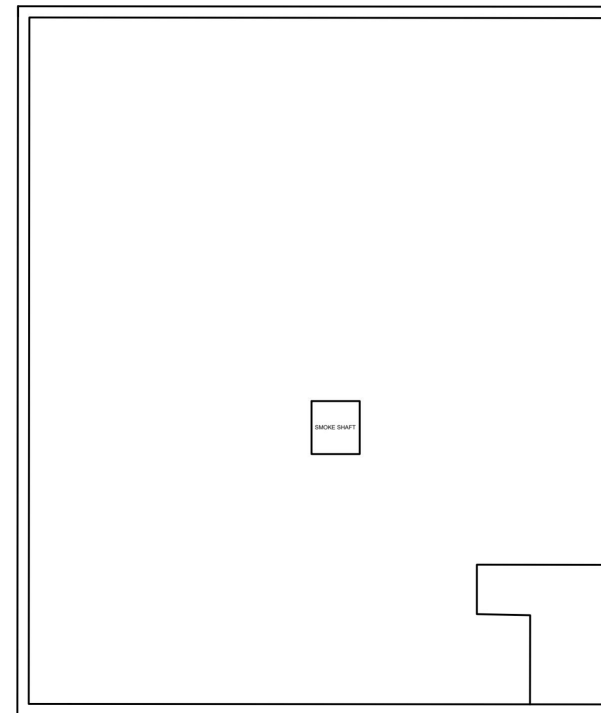
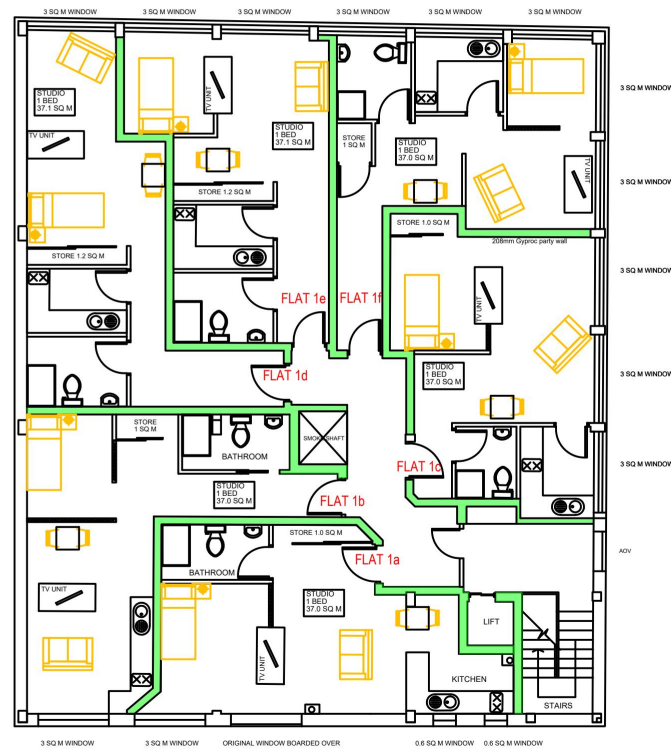
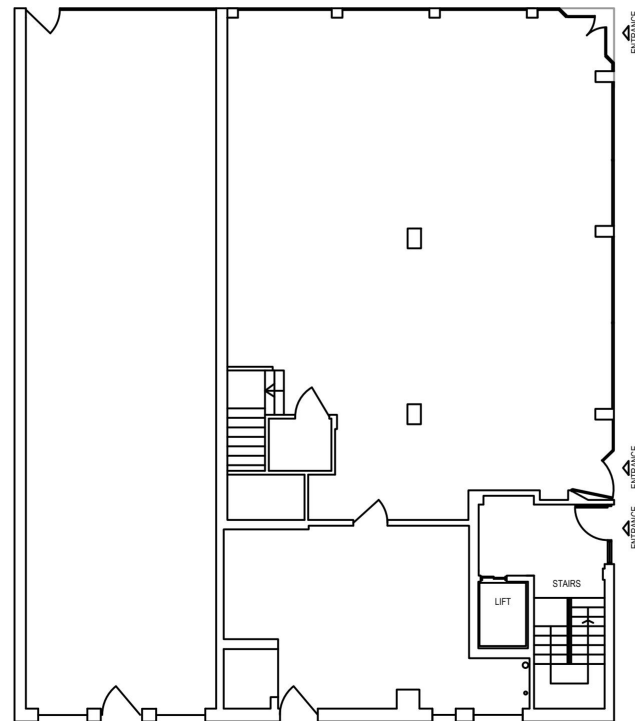
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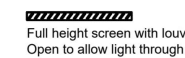
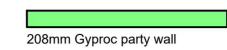
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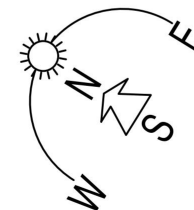
Appendix B



KEY



0.6m unit with TV that serves 2 rooms
open to allow light through



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PROPOSED PLANS

Scale

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Drawing No.	25/026/03
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