1 LYNDHURST ROAD
CAMDEN
LONDON NW3 5PX

BASEMENT IMPACT ASSESSMENT SCREENING

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9194_GB	1.0	Issued for Planning	GB	16th March 2017

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APPENDICES

EXECUTIVE SUMMARY

The Basement Impact Assessment Screening (BIA) is prepared in accordance with London Borough of Camden's Local Development Framework (LDF), Camden Planning Guidance Basements and Lightwells CPG4 dated July 2015. Camden Development Policies – DP27 Basements and Lightwells. London Borough of Camden SFRA URS July 2014. London Borough of Camden, Camden Geological, Hydrogeological and Hydrological Study.

The Basement Impact Assessment Screening is separated into six sections covering 1.0 Introduction, 2.0 Structural Appraisal, 3.0 Hydrogeological Review, 4.0 Drainage and Surface Water Flow Appraisal 5.0 Flood Risk Assessment and 6.0 Conclusions.

The Introduction provides the screening aspect with Figures 1, 2 and 3 noting Yes or No if the basement is likely to have any effect on the surrounding area and referenced to each of the relevant sections 2.0, 3.0, 4.0 and 5.0, within which are provided the scoping and details of potential impact and any mitigation measures with Recommendations and Conclusions within section 6.0.

A topographic survey is available and Taylor Whalley Spyra are also undertaking works on similar sites in the area .The Trial hole and soil investigation and ground water monitoring from this site and nearby sites were reviewed against the site requirements along with local BGS borehole records. These provide the necessary site specific data to undertake the Basement Impact Assessment Screening and to allow for the detailed design to be undertaken following Planning Approval.

The construction of the new lower ground floor rear extension in the temporary and permanent stages has been reviewed with an outline methodology included to demonstrate feasibility.

Existing site material is being recycled and utilised within the new construction with demolition material to be used as hard-core and bricks salvaged for re-use to assist in the construction process. Existing top soil will be retained and reused.

The consideration of SUDS on site for the surface water drainage system with inclusion of green roof and planters has been included.

The BIA Screening concludes that the proposed lower ground floor works may be carried out safely and without adverse effect on the adjacent structures, local hydrogeology, and surface water flow or increase local flooding risk. The risks noted within the BIA, even though they are only slight, can be further mitigated by diligent detailed design and implementation to include the installation of additional surface water drainage, careful detailed installation of temporary works, a suitable on site monitoring procedure and use of experienced contractors and an experienced design consultant team.

1.0 INTRODUCTION

1.1 This Basement Impact Assessment Screening has been prepared by Taylor Whalley Spyra as requested by AS Studio Architectural Services Ltd as part of the Planning Application for the proposed refurbishment of the lower and upper ground floors.

1.2 The information contained within this Basement Impact Assessment Screening (BIA) has been produced to cover the information required within a BIA as set out by London Borough of Camden's Local Development Framework (LDF), Camden Planning Guidance Basements and Lightwells CPG4 dated July 2015. Camden Development Policies – DP27 Basements and Lightwells. London Borough of Camden SFRA URS July 2014. London Borough of Camden, Camden Geological, Hydrogeological and Hydrological Study.

1.3 The purpose of this Basement Impact Assessment Screening document is to review and outline the key points for the safe construction of the proposed refurbishment and rear extension of 1 Lyndhurst Road.

1.4 It also sets out how the upper floors, neighbouring buildings and the local environment and amenity will be protected.

1.5 The topics covered within the BIA are Structural Stability and Movement Assessment, Method of Construction, Hydrogeological, Drainage & Surface Water Flow, Flood Risk and Temporary Works during basement construction.

1.6 This BIA screening document is not the final design information but is intended to demonstrate that each of the aspects of the design and construction has been carefully considered. All aspects will be subject to detailed design once Planning Approval is granted.

1.7 The existing property is located on Lyndhurst Road near the corner of Lyndhurst Gardens and consists of the main house which is four storeys and set back from Lyndhurst Road with a front drive way and rear garden. The existing property foot print has a lower ground floor and rear lighwells set below the rear garden level (refer to Appendix A).

1.8 The Client is proposing to refurbish the existing lower and upper ground floor structure and extend the rear lower ground floor by 3m set back into the garden and replace the existing upper ground floor rear extension (refer to Appendix B).

1.9 The site is 39m long and 11.5m wide being rectangular in shape and orientated approximately South to North. The nearest adjoining properties are 2 Lyndhurst Road to the East boundary and 2 Lyndhurst Gardens to the West boundary. To the South boundary is Lyndhurst Road along the North boundary is the rear garden of 20 Thurlow Road (refer to Appendix A).

1.10 The floor level of the existing lower ground is approximately 47.00 with the existing upper ground floor level approximately 50.000. The external level at the front is approximately 48.000 and the rear garden level is approximately 50.300. The new rear extension floor levels will be maintained as the existing building floor levels.

1.11 The existing building lower ground floor is set 1m below the front of the site and the existing building brick walls footings are 450mm below the lower ground floor slab see TWS drawing 9194_BIA_02 (refer to Appendix C).

1.12 The proposed works will involve the removal of the existing brick retaining walls and the installation of RC retaining walls along the rear and side of the extension and installation of new RC lower and upper ground floor slabs with the removal of part rear and side existing building solid brickwork walls being supported back of the new lower ground floor structure. The installation of the new RC walls and slabs are to be undertaken as in a phased sequenced of construction see TWS drawing 9194_BIA_02 (refer to Appendix C).

1.13 The works will be installed in an agreed phase of construction with suitable temporary works (trench sheeting/propping) as works proceed and as the ground is excavated to lower ground formation level.

1.14 The new reinforced concrete structure is designed to form the permanent support works for the retaining walls and existing structure over. This will form the watertight RC structure with the steps and planters from lower ground floor level leading out up to the rear garden level.

1.15 Once the lower ground floor structure is completed the proposed glazed rear extension will then be built supported off the new rear section of the upper ground floor slab.

1.16 The following screening stages in Figures 3, 4, and 5 taken from CPG4 are reviewed to see the effect of the lower ground floor works on the surrounding area and the relevant scoping stages are noted in the adjacent contents items referenced to within this BIA report, which then outlines any possible impacts and any mitigation necessary to reduce the impact of the basement on the surrounding area.

1.17

Figure 3 - Subterranean (ground water) flow screening chart

Q 1a: Is the site located directly above an aquifer?	No	See Content 3.0, 4.0, 5.0
Q 1b: Will the proposed basement extend beneath the water table surface?	No	
Q 2: Is the site within 100m of a watercourse, well (used/disused) or potential spring line?	Yes	See Content 2.0, 3.0, 4.0
Q 3: Is the site within the catchment of the pond chains on Hampstead Heath?	No	See Content 3.0,
Q 4: Will the proposed basement development result in a change in the proportion of hard surfaced/paved areas?	No	See Content 3.0
Q 5: As part of the site drainage, will more surface water (e.g. rainfall and run-off) than at present be discharged to the ground (e.g. via soakaways and/or SUDS)?	No	See Content 4.0 See Content 4.0
Q6: Is the lowest point of the proposed excavation (allowing for any drainage and foundation space under the basement floor) close to, or lower than, the mean water level in any local pond (not just the pond chains on Hampstead Heath) or spring line.	No	See Content 2.0, 3.0, 4.0

Figure 4 - Slope stability screening chart

Q 1: Does the existing site include slopes, natural or man made, greater than 7° ? (approximately 1 in 8)	No	See Content 2.0, 3.0
Q 2: Will the proposed re-profiling of landscaping at site change slopes at the property boundary to more than 7° ? (approximately 1 in 8)	No	See Content 2.0, 3.0
Q 3: Does the development neighbour land, including railway cuttings and the like, with a slope greater than 7° ? (approximately 1 in 8)	No	See Content 2.0, 3.0
Q 4: Is the site within a wider hillside setting in which the general slope is greater than 7° ? (approximately 1 in 8)	No	See Content 2.0, 3.0
Q 5: Is the London Clay the shallowest strata at the site?	No	See Content 2.0, 3.0,
Q 6: Will any tree/s be felled as part of the proposed development and/or are any works proposed within any tree zones where trees are to be retained?	Yes	See Arboriculture Report
Q 7: Is there a history of seasonal shrink-swell subsidence in the local area, and/or evidence of such effects at the site?	No	See Content 2.0
Q 8: Is the site within 100m of a watercourse or a potential spring line?	Yes	See Content 3.0, 4.0
Q 9: Is the site within an area of previously worked ground?	No	See Content 2.0, 3.0
Q 10: Is the site within an aquifer? If so, will the proposed basement extend beneath the water table such that dewatering may be required during construction?	No	See Content 3.0, 4.0 See Content 3.0
Q 11: Is the site within 50m of the Hampstead Heath ponds?	No	See Content 2.0
Q12: Is the site within 5m of a highway or pedestrian right of way?	No	See Content 2.0
Q 13: Will the proposed basement significantly increase the differential depth of foundations relative to neighbouring properties?	No	See Content 2.0
Q 14: Is the site over (or with the exclusion zone of) any tunnels e.g. railway lines?	No	

Figure 5 - Surface flow and flooding screening chart

Q 1: Is the site within the catchment of the pond chain on Hampstead Heath?	No	See Content 3.0, 5.0
Q 2: As part of the proposed site drainage, will surface water flows (e.g. volume of rainfall and peak run-off) be materially changed from the existing route?	No	See Content 4.0
Q 3: Will the proposed basement development result in a change in the proportion of hard surfaced / paved external areas?	No	See Content 4.0
Q 4: Will the proposed basement result in changes to the profile of the inflows (instantaneous and long-term) of surface water being received by adjacent properties or downstream watercourses?	No	See Content 2.0, 3.0, 4.0 5.0
Q 5: Will the proposed basement result in changes to the quality of surface	No	

water being received by adjacent properties or downstream watercourses? Q 6: Is the site in an area identified to have surface water flood risk according to either the Local Flood Risk Management Strategy of the Strategic Flood Risk Assessment or is it at risk from flooding, for example because the proposed basement is below the static water level of nearby surface water feature?	No	See Content 3.0, 4.0, 5.0 See Content 3.0, 4.0, 5.0

1.18 The Client will appoint a Project Manager to oversee the nominated building contractor and will liaise with London Borough of Camden and local residents to ensure the impact of the proposals are fully understood and mitigated as far as possible.

1.19 Safety both on site and adjacent to the site is of paramount importance and the method of construction proposed has taken this into account.

1.20 Taylor Whalley Spyra are retained as consulting civil and structural engineers for the project. The company was formed in 1955 and is a private company wholly owned by the directors. Our expertise covers all building types and we have particular experience of working in Central London locations where sites have tight urban constraints.

2.0 STRUCTURAL APPRAISAL

2.1 A review of how best to construct the lower ground floor extension taking into account the existing brick walls and footings exposed form site investigation works was undertaken and it was concluded that the most efficient form of construction would be a phased sequence of excavation and construction suitably propped as works progress. This then allows the construction of a rigid reinforced concrete lower ground floor slab and walls as works progress to minimise any disturbance to the existing and surrounding buildings.

2.2 In order to control ground movement the breaking out of the existing mass brick retaining walls and installation of sections of the new slab and walls will be undertaken in a nine bay construction sequence. Each sequenced bay will be undertaken from within the existing garden lightwell working away from the building. This will allow clear working areas and also easier installation of the temporary steel shoring as necessary.

2.3 The process for installing each phased bay and remainder of works is

Prop existing brick retaining wall back to existing lightwell slab
Break out 2m width of the existing brick retaining wall and excavate ground behind to the base of new concrete footing installing trench sheeting to all sides as excavation proceeds
Install below granular drainage channel, blinding and waterproof membrane
Install shuttering and rebar
Cast RC slab thickening and RC wall with rebar to be lapped to adjacent bay
Undertake above for two bays at a time and a minimum of 5 bays apart and allow 48 hours for curing of bay before undertaking an adjacent bay
Once bays and slab thickening are installed excavate and install below granular drainage channel, then install lower ground floor rebar and cast RC slab.
Install temporary support works for removal of existing building brick wall at rear and side return and install new padstones and UC steel support beams and dry pack in place
Remove brickwork and footing and cast slab infill with DPM fully lapped.
Install shuttering to underside of upper ground floor and install rebar and cast upper ground floor RC slab

2.4 With the upper ground floor installed the rear glazed extension can be built and refurbishment of the building then undertaken.

2.5 To the East boundary, 2 Lyndhurst Road is the adjoining semi-detached property of similar construction to 1 Lyndhurst Road. The main house has similar lower ground layout, but the property has an extensive lower ground floor rear extension back under the garden of RC construction. The proposed lower ground floor extension is adjacent to the garden boundary wall of the two properties. See adjoining property drawings for layout and sections (refer to Appendix D) and TWS drawing 9194_BIA_02 shows the permanent and temporary works (refer to Appendix C).

2.6 To the West Boundary, 2 Lyndhurst Gardens is similar construction but different layout. The property has a lower ground floor under with the existing building setback approx. 1.2 from the east boundary garden wall. The lower ground floor extension is set back 1.5m from the garden boundary wall. See TWS drawing 9194_BIA_02 shows the permanent and temporary works (refer to Appendix C).

2.7 To the North Boundary, 20 Thurlow Road gardens. The lower ground floor rear extension is 15m away from the rear garden site boundary.

2.8 To the South Boundary, Lyndhurst Road. The main building is set back 8.2m from the boundary along the road with the lower ground floor extension at the rear of the property.

2.9 First and Second floors at 1 Lyndhurst Road. These are occupied by different tenants with communal access at upper ground floor. The side access and rear garden are parts of 1 Lyndhurst Road and are within the confines of the site ownership and not accessible to the above floor flats. See TWS drawing 9194_BIA_02 showing the permanent and temporary works (refer to Appendix C).

2.10 To the North there is a Network Rail tunnel which is approximately 32m from the proposed lower ground floor works and at an unknown depth, The tunnel is to distant to be affected by the works, but contact with Network Rail has been made to review any requirements they may have.

2.11 All properties that are adjacent to the proposed development will fall within The Party Wall Act 1996 which will require building condition surveys to be undertaken.

2.12 As part of the design and to control ground movement, a scheme will be agreed as part of the Party Wall agreements to install a movement monitoring system to monitor movement and vibration during the course of the basement works. This will involve the location of monitoring nodes to be located along the surrounding ground, on the retained garden walls, on the existing building rear facade and also on adjacent property walls, where allowed, as part of the Party Wall agreements. Readings will be taken at regular intervals and additional readings undertaken when specific works are planned. See TWS drawing 9194_BIA_06 shows the proposed movement monitoring (refer to Appendix L).

2.13 The design of the RC bay installation sequence, lower ground floor slab and temporary support works is to be undertaken to minimise any structural disturbance to the adjoining properties, existing building or infrastructure. See drawing TWS drawing 9194_BIA_02 shows the proposed bay sequence works (refer to Appendix C).

2.14 The nearest buildings adjacent to the proposed basement are 2 Lyndhurst Gardens and 2 Lyndhurst Road and the flats above. See existing building drawings (refer to Appendix D). The design of the reinforced retaining walls and reinforced box structure will incorporate an allowance for a surcharge loading to take into account the location and loads from the adjacent building. An allowance will also be included to allow for any future surcharging of the adjacent ground along the site boundary next to the new reinforced retaining walls.

2.15 The temporary propping against the existing brick retaining walls are to minimise disturbance to the surrounding ground whilst excavation of the lower ground and installing the lower ground slab works are undertaken.

2.16 A detailed analysis of the garden retaining walls and required temporary works will be undertaken as part of the party wall stage and detailed analysis of the new UC beams for support of the external brickwork walls will be undertaken once planning approval is granted. All the proposed works are minor and within the normal type of construction that any competent contractor can undertake.

2.17 From our experience of similar works movement can be limited to the existing building and adjoining properties as Very Slight, as categorised by Damage Category Chart (CIRIA C580).

2.18 There are three possible causes of ground movement; the installation of the underpinning to the boundary walls, the excavation for the lower ground floor and the adjustment of the ground under the net load changes.

2.19 The estimated movements inside and outside the lower ground floor are considered on basis of structural loads and site level and are considered to be minimal.

2.20 The installation of the rear extension reinforced walls and slabs is away from any adjoining main buildings which all have lower ground floors the closest is 2 Lyndhurst Road which already has a large rear extension under the garden extending beyond the proposed site rear extension (refer to Appendix D). 2 Lyndhurst Gardens is 2.7m away with a lower ground floor and on the corner and is solid brick construction with footings at the same level us 1 Lyndhurst Road.

2.21 Any horizontal ground movement from the installation of the RC walls would be limited and with good workmanship horizontal movement would be negligible and not affect adjacent properties.

2.22 Excavation depth on site will be about 2.3m to slab formation with the excavation undertaken in stages and propping introduced prior to excavation movements would be expected to be minimal and lie within its original position and with good workmanship these movements are unlikely to result in damage greater than category 1 – Very slight.

2.23 The existing footing for the adjoining properties are expected to be similar to 1 Lyndhurst Road as the buildings are similar construction design layout to our existing site and the ground levels are the same. See TWS drawing 9194_BIA_02 (refer to Appendix C).

Category of damage	Description of typical damage	Approximate crack width (mm)	Limiting tensile strain ε_{lim} (per cent)
0 Negligible	Hairline cracks of less than about 0.1 mm are classed as negligible	<0.1	0.0-0.05
1 Very slight	Fine cracks that can easily be treated during normal decoration. Perhaps isolated slight fracture in building. Cracks in external brickwork visible on inspection	<1	0.05-0.075
2 Slight	Cracks easily filled. Redecoration probably required. Several slight fractures showing inside of building. Cracks are visible externally and some repointing may be required externally to ensure weathertightness. Doors and windows may stick slightly.	<5	0.075-0.15
3 Moderate	The cracks require some opening up and can be patched by a mason. Recurrent cracks can be masked by suitable lining. Repointing of external brickwork and possibly a small amount of brickwork to be replaced. Doors and windows sticking. Service pipes may fracture. Weathertightness often impaired.	5-15 or a number of cracks > 3	0.15-0.3
4 Severe	Extensive repair work involving breaking-out and replacing sections of walls, especially over doors and windows. Windows and frames distorted. floor sloping noticeably. Walls leaning or bulging noticeably. some loss of bearing in beams. Service pipes disrupted.	15-25 but also depends on number of cracks	>0.3
5 Very severe	This requires a major repair involving partial or complete rebuilding. Beams lose bearings, walls lean badly and require shoring. Windows broken with distortion. Danger of instability.	Usually > 25 but depends on number of cracks	

Damage Category Chart (CIRIA C580)

Table 1.1

2.24 Investigation works have been undertaken in the form of 4 trial holes at lower ground floor level to confirm existing foundations, soil type and ground water. The existing on site ground

conditions are approximately 400mm of made ground overlaying 600mm of sandy gravel over Silty Clay consistent with London Clay formation (refer to Appendix E).

2.25 There was some slight ground water in the base of the rear garden light well trial hole when Risk Management Limited visited site and noted as possible seepage within the made ground which is to be expected. Initial return visits to site and works whilst undertaking the trail hole did not encounter any water seepage, and it is believed due to the water being cloudy that this came from a leaking adjacent drain which will be repaired as part of the works. All other trial holes were dry.

2.26 Due to existing footing depths and adjoining 2 Lyndhurst Road lower ground floor extension under the garden there is no groundwater flow under the building, so the proposed rear extension is not expected to restrict any possible ground water flow to these areas. It is intended to install a granular drain beneath the new lower ground floor slab and these will allow any future groundwater to this area to flow as would be the case in the existing condition.

2.27 A detailed Arboricultural Report has been undertaken by ACS (TREES) consulting ref no ha/aiams1/1lyndurstgdns dated 16th March 2017. This notes that part of the works fall within the tree protection zone for one of the trees. The Arboricultural Report confirms that the impact assessment for undertaking the works adjacent to the tree is neutral and confirms the required sequence of works to be undertaken whilst working adjacent to the area which is to be site supervised by an Arboriculturist.

3.0 HYDROGEOLOGICAL REVIEW

3.1 The average existing site ground level is in the order of 47.2m OD at the front and steps up to 50.8m OD for the back of the garden. This confirm the overall slope for the site is in the region of 5 degs and a 1 deg fall across the width of the (refer to Appendix G).

3.2 The geology of the area is well known as summarised on the relevant geological sheets, being Claygate Beds part of the London Clay formation and confirmed on site by the trial holes (refer to Appendix E & H).

3.3 The current policy implemented by the Environment Agency is to maintain water levels in the lower underlying chalk aquifer to those which currently exist, i.e. approximately -10m OD

3.4 The site is not within any ground water protection zone as reviewed with the Environment Agency maps and is classed by the EA as a minor aquifer zone with permeability. This is mainly due to the London Clay formation.

3.5 It is noted that approximately 80m away to the West is a tributary for the Tyburn River which has been culverted

3.6 By virtue of the existing footings and the proposed lower ground floor structure design ground water flow will not be restricted and the proposed design will allow future ground water to flow around and below. We confirm that the proposed development will not lead to an increase in flood potential or impediment of ground water flow.

3.7 Ground water was not encountered whilst excavating the trial holes. There may possibly be slight seepage from within the made ground as the rear garden trial hole had standing water when RML undertook their site visit, but the water was cloudy and most likely emanated from an adjacent leaking drain. On two subsequent return visits all the trial holes were dry (refer to Appendix E).

3.8 The RML Trial holes indicate that there may be some superficial water seepage from within the shallow made ground at the rear of the property. Ground water flow on site is considered to be very low and will not affect the proposed lower ground floor or adjoining properties.

3.9 It is unlikely therefore that the proposed rear extension will be influenced directly by these ground water levels.

4.0 DRAINAGE AND SURFACE WATER FLOW APPRAISAL

4.1 The existing site area is 439m² consisting of 292² of non-permeable hard standing and 147m² of permeable soft standing (refer to Appendix K).

4.2 The proposed works are within the existing areas of hardstanding and as part of the works 9m² of green roofs will be installed providing surface water storage (refer to Appendix K).

4.3 The 9m² of green roofs will replace existing hard standing which currently drains into the site drainage system that discharges into the public sewer in Lyndhurst Road

4.4 The drainage design for the foul water system will be gravity fed to the sewer in Lyndhurst Road.

4.5 The profile of surface water inflow to adjacent properties or water courses will not be materially changed and the use of SUDS green roof areas will slightly reduce the surface water discharge into the main drainage system.

4.6 The lower ground floor structure will be designed to allow for water to flow between the site boundaries along the RC walls and under the lower ground floor slab, where the installation of a number of granular stone drainage channels will allow ground water seepage to flow freely.

5.0 FLOOD RISK ASSESSMENT

5.1 Reference to the Environment Agency maps confirms that the site is not within a flood zone area and is not at risk of flooding from local rivers/water features and defines the area as having a very low risk of flooding due principally to its geology and topography.

5.2 Thames Water have been consulted and confirm that there are no known incidents of historic flooding within the vicinity of the site from surcharging of the public drain system (refer to Appendix I).

5.3 The inclusion of green roof areas on site will reduce the surface water runoff from site and the discharge of surface water into the main drainage system. The effect of this is to reduce volume of site run off discharging into the main drainage system and reduce the effects of any possible flooding further downstream.

5.4 The trial hole investigation works undertaken on site confirms the ground water seepage and any ground water flow on site is considered to be of low volume and superficial.

6.0 CONCLUSIONS

6.1 Analysis of the various aspects of construction has been undertaken to demonstrate how the level of sequencing will enable the development to be constructed safely with ground movements within acceptable levels.

6.2 The stability of the adjacent properties and surrounding ground will not be affected by the lower ground floor works with the influence of adjoining building foundation depths taken into account during the initial design process as indicated on TWS drawings 9194_BIA_02 (refer to Appendix C).

6.3 Any temporary localized dewatering of the lower ground floor area will be reviewed, designed and monitored to reduce the water level locally to the area of works for the

construction of the lower ground floor. Water levels will be monitored prior to the start of works.

6.4 Prior to commencement a full schedule of condition will be carried out to all relevant buildings as defined within The Party Wall Act 1996 where the excavations may be within the influence zone of existing foundations.

6.5 The desk top study and investigation works carried out to date indicates that the construction of the new lower ground floor levels will not lead to a cut off of natural ground water flow. Detailed designs will follow as part of the construction design. If any supplemental drainage is required it will be included as necessary to ensure that the current ground water equilibrium levels are maintained and that there is no increase in the risk of flooding.

6.6 The construction of the lower ground floor will be founded within the London Clay at a depth similar to the existing footings and is not envisaged as having a detrimental effect on the local or surrounding hydrogeological conditions.

6.7 There is no increase in hard standing areas and with the incorporation of green roof areas around the site as shown on TWS drawing 9194_BIA_05 (refer to Appendix K) this will minimise the effects on the surrounding area and maintain the existing ground water conditions on site.

6.8 There will not be any increase in foul water flow from the site.

6.9 The surface water runoff and subterranean flow from the site can maintain the existing site condition with the surface water granular drainage beneath the lower ground floor being designed to maintain the existing site flow rates and will minimise any changes to the existing conditions along the adjoining properties.

6.10 Safety both on site and adjacent to the site is of paramount importance and the method of construction proposed has taken this into account.

6.11 The selection of the main contractor, sub-contractor and designer of temporary works will be based on having previous experience constructing similar projects and a requirement to provide programmes and method statements detailing the final sequence of construction prior to carrying out works on site. The main contractor is to be registered with The Considerate Constructors Scheme.

6.12 One of the site requirements will be the selection of experienced site supervision staff and selection of plant and machinery based on minimising noise and vibration.

6.13 The project as currently envisaged is feasible in terms of the general construction process, structural stability, long term integrity of adjacent buildings and the existing site and surrounding infrastructure.

For and on behalf of
TAYLOR WHALLEY SPYRA

SIMON LANE
BSc(Eng), CEng, FICE, FIStructE,

APPENDIX A

TWS - 9194_ BIA_01 - SITE LOCATION PLAN AND SURROUNDING AREA

IMAGE 01

1 LYNDHURST ROAD

IMAGE 02

2 LYNDHURST ROAD

IMAGE 03

2 LYNDHURST TERRACE

IMAGE 04

LYNDHURST ROAD WEST VIEW

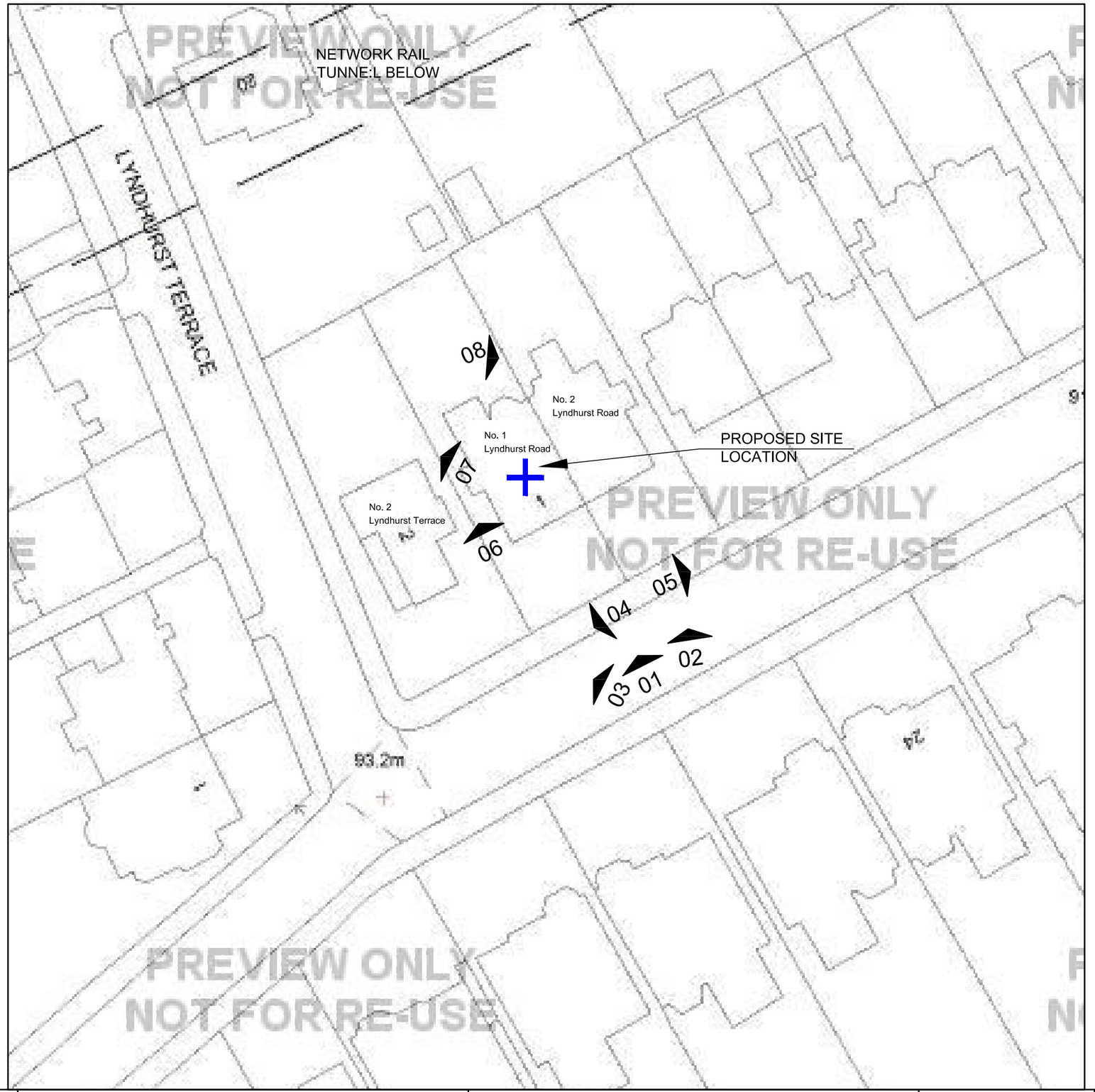


IMAGE 05

LYNDHURST ROAD EAST VIEW

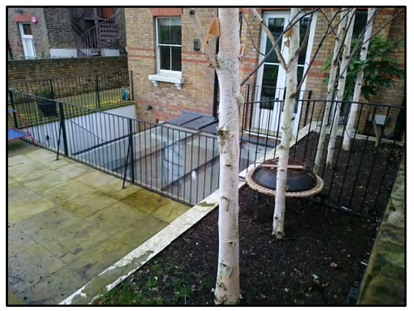
IMAGE 06

2 LYNDHURST TERRACE AND 1 LYNDHURST ROAD BOUNDARY

IMAGE 07

2 LYNDHURST TERRACE REAR

IMAGE 08



2 LYNDHURST ROAD AND 1 LYNDHURST ROAD REAR BOUNDARY

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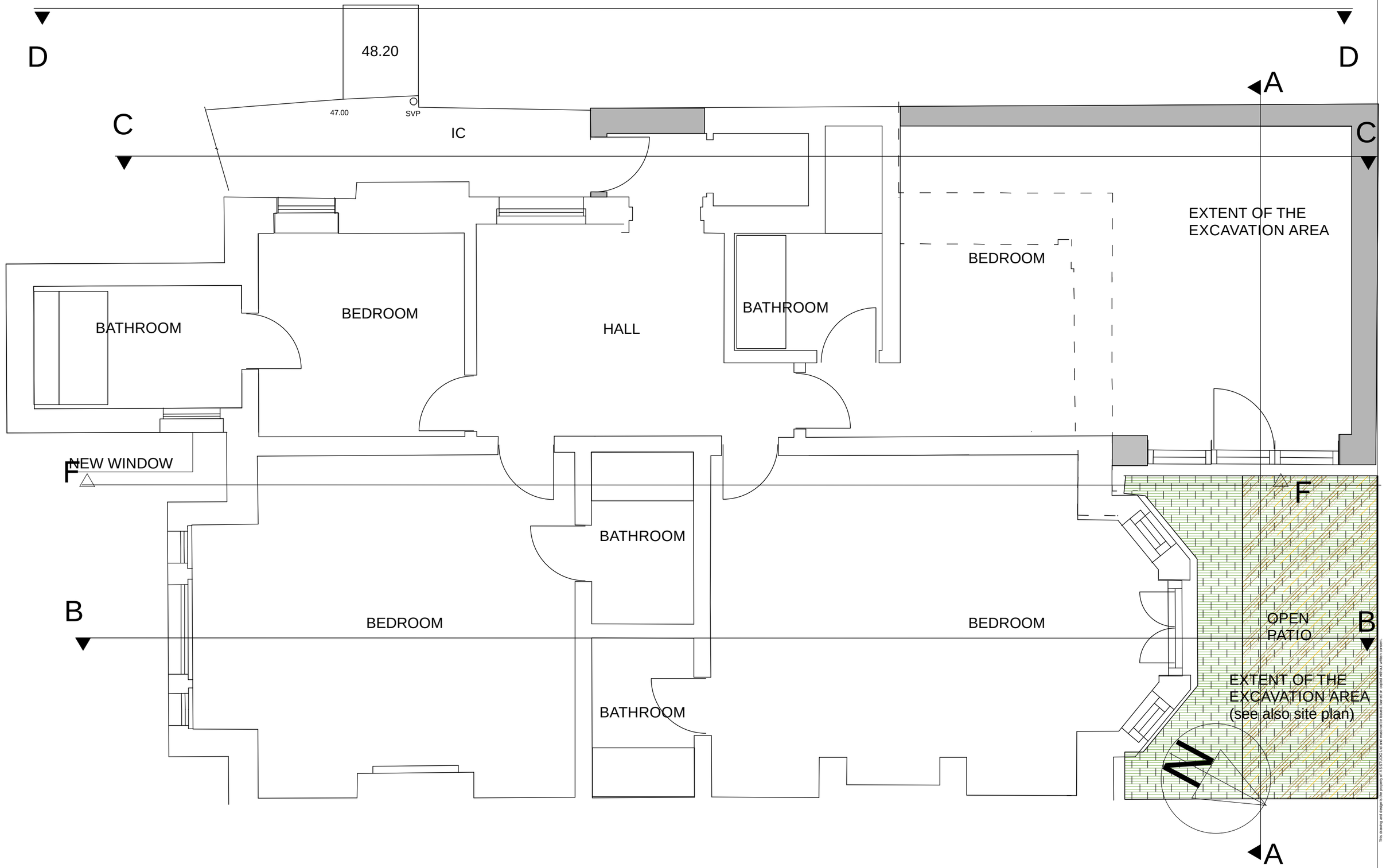
Contract	Title	Scale	Date	Drawn
1 LYNDHURST ROAD, CAMDEN, LONDON, NW3 5PX,	SITE LOCATION INDICATING ADJACENT PROPERTIES	NTS	13.03.17	GB
		Job No. 9194	Drawing No. BIA_01	Rev. -

APPENDIX B

ARCHITECTS DRAWINGS FLOOR PLANS AND SECTIONS



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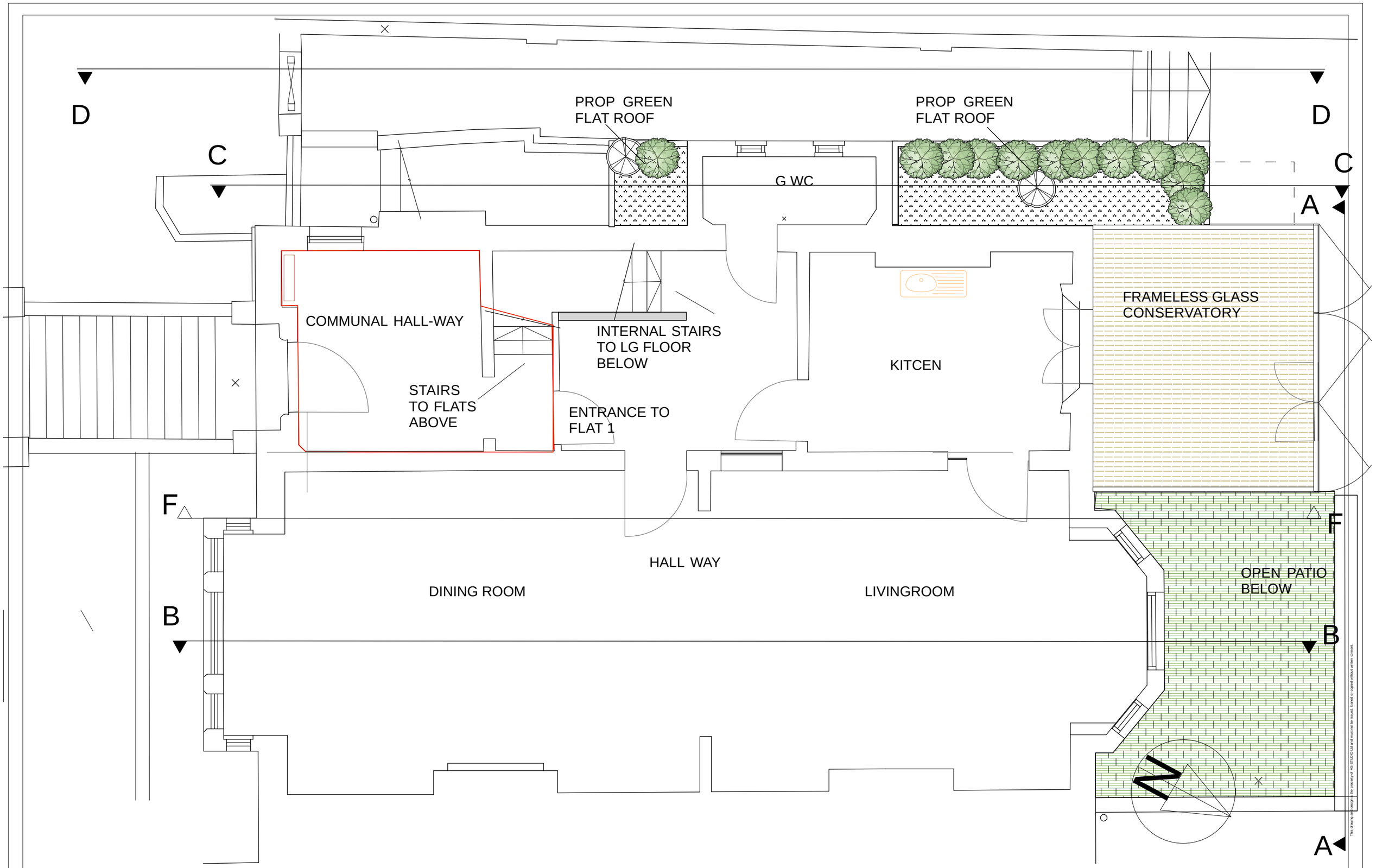
PROJECT ADDRESS: 1 Lyndhurst Road	DRAWING NAME: PROPOSED LOWER GROUND FLOOR		REVISION:
	DRAWING NO: 2001(PLA)100	DWG FILE: 2001(PLA100-300	
CLIENT_NAME:MM	PROJECT STAGE: PLANNING	DRAWN: AS	
	VERSION:	SCALE: 1:50 SIZE:A-3	DATE: 20.01.2017



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PROJECT ADDRESS: 1 Lyndhurst Road	DRAWING NAME : PROPOSED GROUND FLOOR		REVISION:
	DRAWING NO:2001(PLA)101	DWG FILE: 2001(PLA)100-300	
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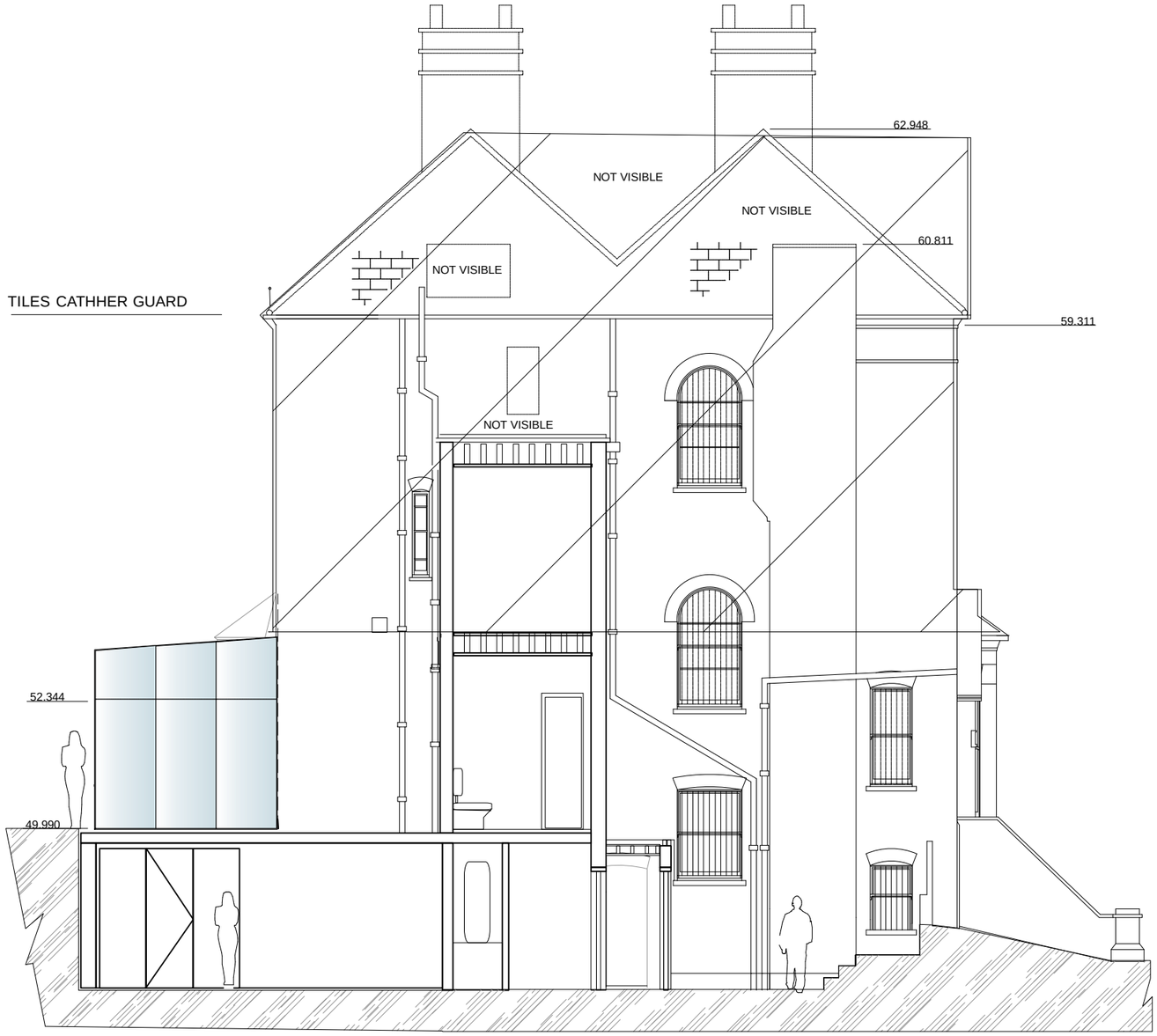

PROPOSED SECTION C-C

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PROJECT ADDRESS: 1 Lyndhurst Road	DRAWING NAME: PROPOSED SECTION C - C		REVISION:
	DRAWING NO: 2001(PLA)301	DWG FILE: 2001(PLA)100-300	
CLIENT_NAME:MM	PROJECT STAGE: PLANNING	DRAWN: AS	
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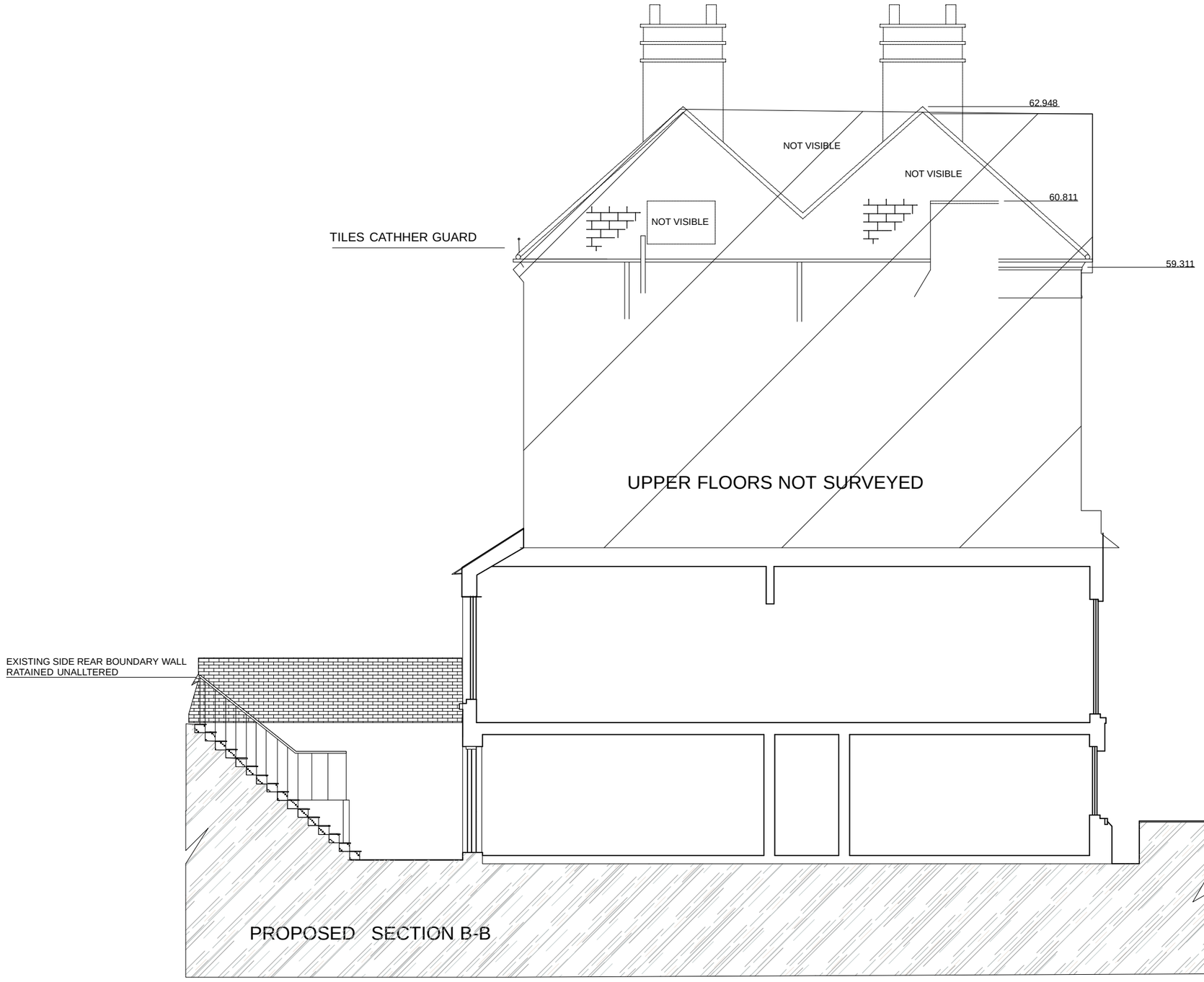

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PROJECT ADDRESS: 1 Lyndhurst Road	DRAWING NAME: PROPOSED SECTION B - B		REVISION:
	DRAWING NO: 2001(PLA)302	DWG FILE: 2001(PLA)100-300	
CLIENT_NAME:MM	PROJECT STAGE: PLANNING	DRAWN: AS	
	VERSION:	SCALE:1:100 SIZE:A-3	DATE: 20.01.2017

APPENDIX C

TWS - 9194_ BIA_02 _ EXISTING AND PROPOSED STRUCTURAL ELEVATIONS, SECTIONS AND PLANS