4.6 Facade Development

Option A
- Storey height openings
- Casement windows
- Roof access via a storey height circulation volume
- Full width balcony at FF
- Flat balustrades at FF, SF and TF

Option B
- Storey height openings
- Arched openings at GF
- Casement windows at FF and SF
- TF treaded as a colonnade with sliding doors set back from the facade
- Roof access via an openable skylight
- Full width balcony at FF
- Flat balustrades at FF, SF and TF

Option C
- Storey height openings
- Arched openings at GF
- Casement windows at FF and SF
- TF treated as a colonnade with casement windows
- Roof access via an openable skylight
- Full width balcony at FF, flat balustrade at FF, SF and TF

Option D
- Storey height openings
- Casement windows at FF and SF
- TF casement windows arched
- Roof access via an openable skylight
- Full width balcony at FF, flat balustrade at FF, SF and TF

Option E
- Storey height openings
- Casement windows at GF, FF and SF
- TF casement windows arched
- Vertical emphasis with facade stepped brick profile
- Roof access though via skylight
- Full width balcony at FF, flat balustrade at FF, SF and TF

Option F
- Storey height openings
- GF casement windows arched
- Casement windows at FF, SF and TF
- Roof access though via skylight
- Full width balcony at FF, flat balustrade at FF, SF and TF

Option G; planning submission
- GF casement windows arched
- Full height openings at GF and FF
- Reduced height openings at SF and TF
- Roof access though via skylight
- Full width balcony at FF, flat balustrade at FF, SF and TF

4.7 Proposal

Organisational Strategy

The proposal is for a 3 bedroom 4 storey single dwelling house with basement. There is a balcony at first floor at the front, terraces at the rear on second and thrid floors, and a terrace accessed via a retractable skylight on the roof at the rear.

As a terraced property, the logic of the organisation is dictated by access to natural light and venticlation which is limited to the front and rear. Accordlingly, the plan is organised with a central circulation and services zone, comprising a stone eliptical stair, a lift, storage and ensuite facilities at the heart of the plan, which in turn allows the habitable spaces of bedrooms, living, kitchen etc to be located to the front and rear.

The key living spaces of kitchen, dining and living are located on the second and thrid floors to make maximum use of the available natural light, aspect and access to the external amenity spaces. There are 3 bedrooms, all with ensuite facilities on the second and first floors. The ground floor has a large entrance hall with cloak space, powder room and a study at the rear, and the services and laundry are in the basement along with a TV/media room and a Gym with ensuite.

There is cycle storage for 2 bikes within the basement lightwell at the rear.

Refuse and Recycling

Refuse is collected as existing, on a daily basis from a collection point at the end of the alley at the junction with Rex place. Internally, there is a refuse and recycliing collection point within the pantry on the thrid floor.

4.7 Proposal

Structure

The Construction Method Statement (CMS) submitted with this application has been compiled by Solid Geometry Structural Engineers, David Nash CEng MIStructE is a practice Director and will be overseeing the works as they progress. The construction phase will be movement monitored and assessed for compliance against maximum allowable and trigger levels within the mstructural specification. GEA were commissioned to undertake the Building Impact Assessment (BIA) and Desk Study submitted with this application. The trial pit and trial hole locations were specified by the engineer and revealed the existing ground conditions, soil composition and contamination, the foundation depths along both party walls and ground water at a depth of 4.20m below existing ground floor level. GEA also identified neighbouring properties No17 and No21, and nearby properties No15 South street and No10 Balfour mews as sensitive structures requiring specific analysis, the results of which are contained within the report.

Careful consideration has been given to the principles and construction methodology in response to these findings. The depth of the basement is 3.2m to limit any potential exposure to the existing ground water levels. The structural arrangement of the upper storeys is configured around the vertical structural core of the lift shaft which stabilises the steel and concrete floor plates and a perimeter of relatively light weight steel framing. The arrangement allows for a rapid assembly once the concrete works are complete, and the creation of open floor plans front and rear for the habitable spaces and thus the potential flexibility for re-organising the accommodation in the future life of the building.

A Burland scale evaluation has been undertaken, the CMS states the following:
'A detailed ground movement assessment has been carried out by GEA to assess both the vertical and horizontal potential movements due to basement excavation. The calculated movements have been used to carry out building damage assessments on the walls of all neighbouring properties classifying them using Burland damage categories in accordance with Table 6.4 of CIRIA C760. All results except one were calculated as Category 0, the lowest possible category, which indicates negligible potential damage. The one wall that was not Category 0 only just fell into Category 1 so again negligible damage would be expected.'

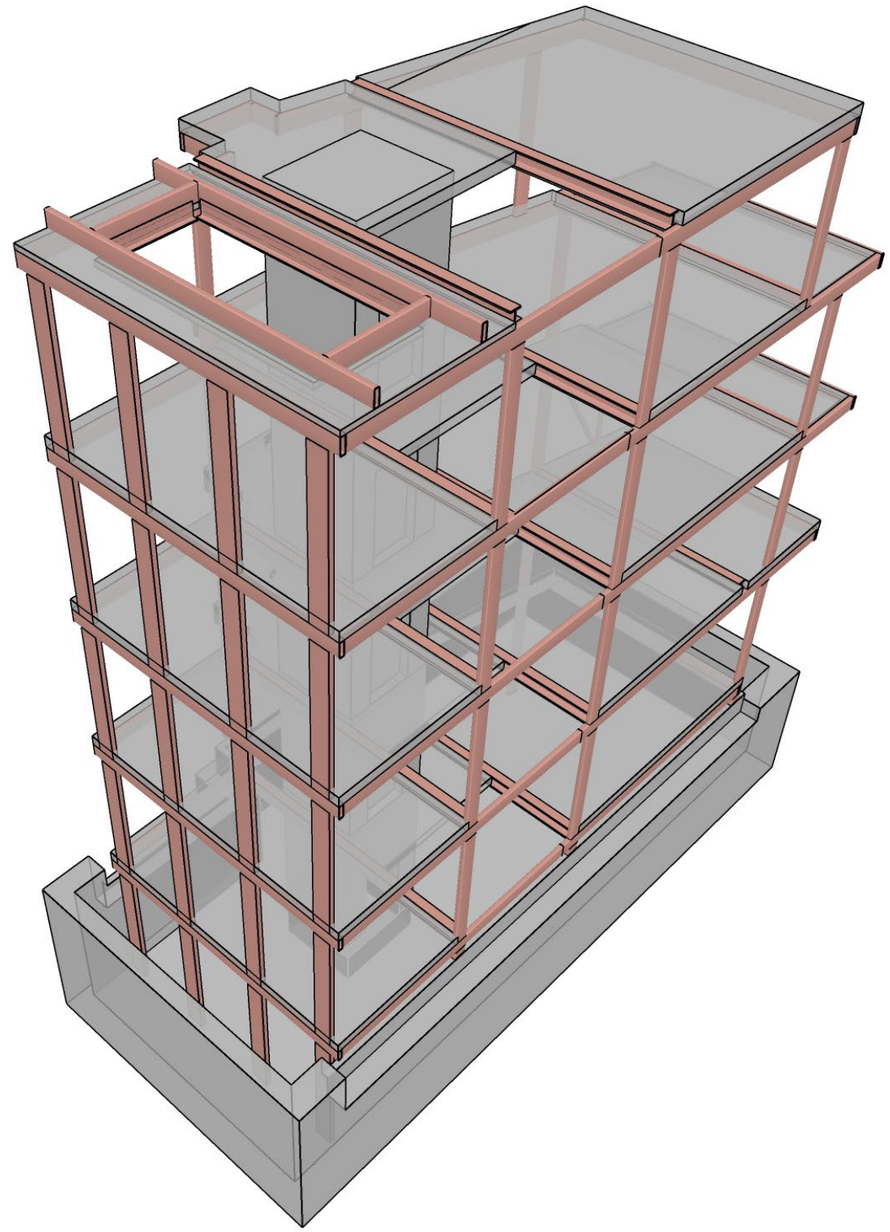
2. Light study

Development and Light Consultancy were commissioned to undertake the Daylight and Sunlight effect of the Proposed Development upon surrounding properties, their report is submitted with this application.
The form and massing of the proposed scheme is dictated by the findings of this study.
D+LC comment:
'The analysis demonstrates a high rate of compliance with the typical recommendations in the BRE Guidelines, particularly for a dense urban locality of this type.'

3. SuDS and Flood Risk

STM Environmental were commissioned to undertake the SuDS and Flood Risk appraisal, their report is submitted with this application. TSL worked with STM to develop the attenuation and environmental requirements for the performance of the building as a coherent aspect of the design philosophy of the architectural response. In accordance with NPPF and LLFA current planning policy, compliance is achieved though a combination of responses; areas of Green roof to promote BioDiversity, SuDS planter tanks to attenuate and control the volume of storm water discharged from the building into the mains sewer, and grey water harvesting for use of the WCs throughout the property.

STM state:
"The proposed SuDS will provide a total attenuation volume of approximately 4.1m3 for stormwater volume control and a reduction in impermeable area of 9m2. The proposed SuDS will help to reduce local flood risk by providing 4.1m3 of attenuation on site, whilst increasing biodiversity and providing 235 litres for grey water recycling within the property. It will therefore be in compliance with the GLA current planning policy (Policy 5.13 & 5.15) and the NPPF."



4.7 Proposal

Environmental Strategy

WME Boom have developed the Energy Strategy and Performance Specification submitted with this application.

The strategy is to adapt a passive solution; optimizing the orientation as well as providing highly insulated and a highly airtight dwelling.

An air source heat pump is located in the plant room in the basement and will provide space heating and cooling throughout the property. There is mechanical heat recovery for the whole dwelling, and there are openable high spec double glazed metal framed windows throughout to allow natural ventilation. Domestic hot water shall be delivered by a dedicated gas fired condensing boiler, feeding an indirect hot water calorifier for hot water storage. Heating will be via underfloor heating, cooling via chilled ceilings. Low energy lighting will be used throughout.

Two sets of Building Regulation calculations have been undertaken, for the proposed new SAP 10.1 including carbon factors the dwelling achieves a 56% above compliance pass, for the existing Building Regulations SAP2012 it achieves a 17% above compliance pass.

dBA Acoustic Consultancy have been commissioned to undertake an acoustic survey of the existing dwelling and a noise impact assessment in accordance with WCC requirements (ref Acoustic Survey submitted with this application). Plant noise emission will be designed to be at least 10bB below lowest background noise levels.

Demolition

A specialist demolition contractor will be used to dismantle the existing structure. Site setup will be HSE compliant, construction materials such as the timber joists, stock bricks, doors, copper pipework etc will be recycled, all other materials will be separated to those that can be up-cycled as hardcore, and those to be disposed via accredited facilities.

Lifetime Homes

- Entrance into the house is straight on from level external hard landscaping and there is a clear opening with of 900mm. The threshold is level, there is a canopy over the entrance to protect from the weather and the area is illuminated
- As a single dwelling there are no communal stairs or lifts
- Hallways are 900mm wide, head on doors have a clear opening width of 750mm, the doors into bedrooms have a clear opening width of 900mm
- There is circulation space for wheel chair users on the ground floor; there is 1200mm clear circulation space around the kitchen units
- There is flexibility to create a bedroom space on the entry level to the house
- There is a fully accessible WC and bathroom on the entrance level of the house
- The Bathroom walls are of load bearing construction and capable of firm fixing and support for adaptations such as grab rails
- The stairs flights are 900mm wide and there is a lift
- The floor construction allows for potential installation of hoists in the bedrooms and bathroom
- The ground floor bathroom addresses the accessible WC requirements
- The living space is walled with storey height glass looking out the rear aspect.
- All habitable rooms have opening windows; sill heights are at maximum 450mm from finished floor level
- The structure is configured around a central core, leaving the habitable zones to the front and rear able to be reconfigured at a later stage in the life of the building
- the proposed glazing at ground floor at the front creates interaction and surveillance with the street.

4.7 Proposal

Access

The property enjoys excellent access to local Bus and underground services

Tube stations:
Bond street; Central and Jubliee lines
Green Park; Jubliee, Piccadilly, Victoria
Hyde Park Corner; Piccidilly

Bus routes:
2, 9, 13, 14, 16, 19, 22, 23, 36, 38, 52, 74, 137, 148, 390, 414, 758, N2, N9, N16, N19, N22, N38, N74, N97, N137, PL-1

For the new dwelling, there is level access via the main front door from the street, at the rear there is access from the courtyard to the ground floor via 5 steps, and from the basement to the rear alley via a stair of 14 steps within the rear lightwell. There is escape from the front lightwell via a consealed security stair.

Internally, there is a lift that rises through all storeys of the house which is sized to allow for a wheelchair user and an assistant or 5 people. There is also a large stone eliptical stair that rises from the ground floor to the roof.

Areas

	GIA	GEA
Basement	75 m^2	129 m^2
Ground floor	74 m^2	92 m^2
First floor	83 m^2	105 m^2
Second floor	73 m^2	102 m^2
Third floor	69 m^2	98 m^2
Roof	8 m^2	86 m^2
TOTAL	382 m^2	612 m^2

4.8 Proposed Facades

South elevation

Legend:

01	Portland stone
02	Black brick
03	White brick
04	Low iron double glazed windows with bronze frame
05	Bronze door with fanlight
06	Bronze door
07	Bronze balustrade
08	Glass balustrade
09	Low iron double glazed openable roof light
10	Low iron double glazed fixed roof light
11	Stairs in Portland stone
12	bike store
13	Planters
14	Balanced flue
15	ASHP vent with acoustic attenuators
16	Louvered door with acoustic attenuators
17	opaque double glazed windows with bronze frame

4.8 Proposed Facades

North elevation

Legend:

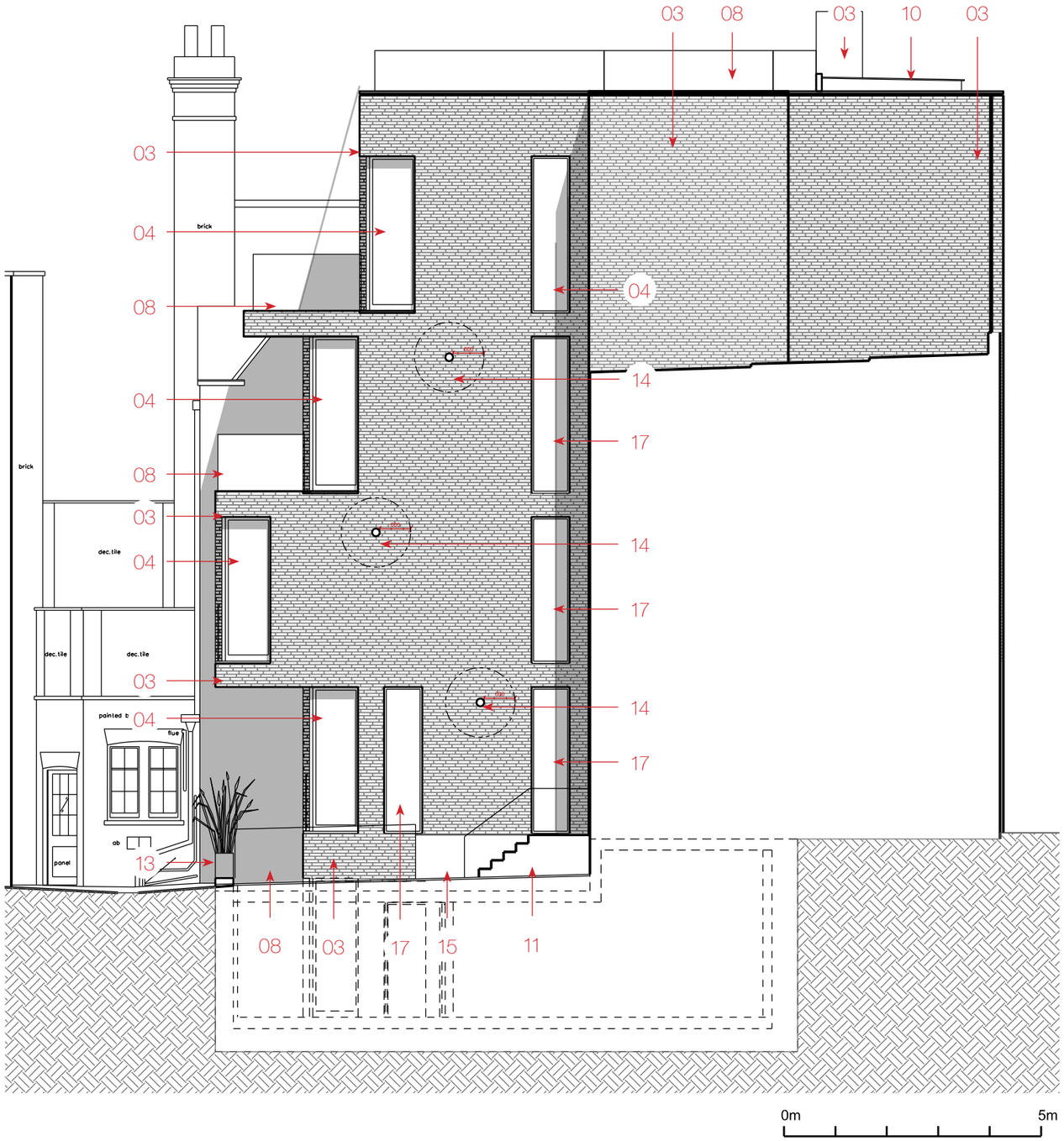
01	Portland stone
02	Black brick
03	White brick
04	Low iron double glazed windows with bronze frame
05	Bronze door with fanlight
06	Bronze door
07	Bronze balustrade
08	Glass balustrade
09	Low iron double glazed openable roof light
10	Low iron double glazed fixed roof light
11	Stairs in Portland stone
12	bike store
13	Planters
14	Balanced flue
15	ASHP vent with acoustic attenuators
16	Louvered door with acoustic attenuators
17	opaque double glazed windows with bronze frame

4.8 Proposed Facades

West elevation

Legend:

01 Portland stone
02 Black brick
03 White brick
04 Low iron double glazed windows with bronze frame
05 Bronze door with fanlight
06 Bronze door
07 Bronze balustrade
08 Glass balustrade
09 Low iron double glazed openable roof light
10 Low iron double glazed fixed roof light
11 Stairs in Portland stone
12 bike store
13 Planters
14 Balanced flue
15 ASHP vent with acoustic attenuators
16 Louvered door with acoustic attenuators
17 opaque double glazed windows with bronze frame



4.09 Proposed Plans

Basement floor plan

Areas

BF-01	TV room	22 m²
BF-02	Gym	25 m²
BF-03	Laundry	8 m²
BF-04	Bathroom	4 m²
BF-05	Circulation	4 m²
BF-06	Plant room	12 m²
	Front lightwell	4 m²
	Rear lightwell	14 m²
GIA		75 m²
GEA		129 m²

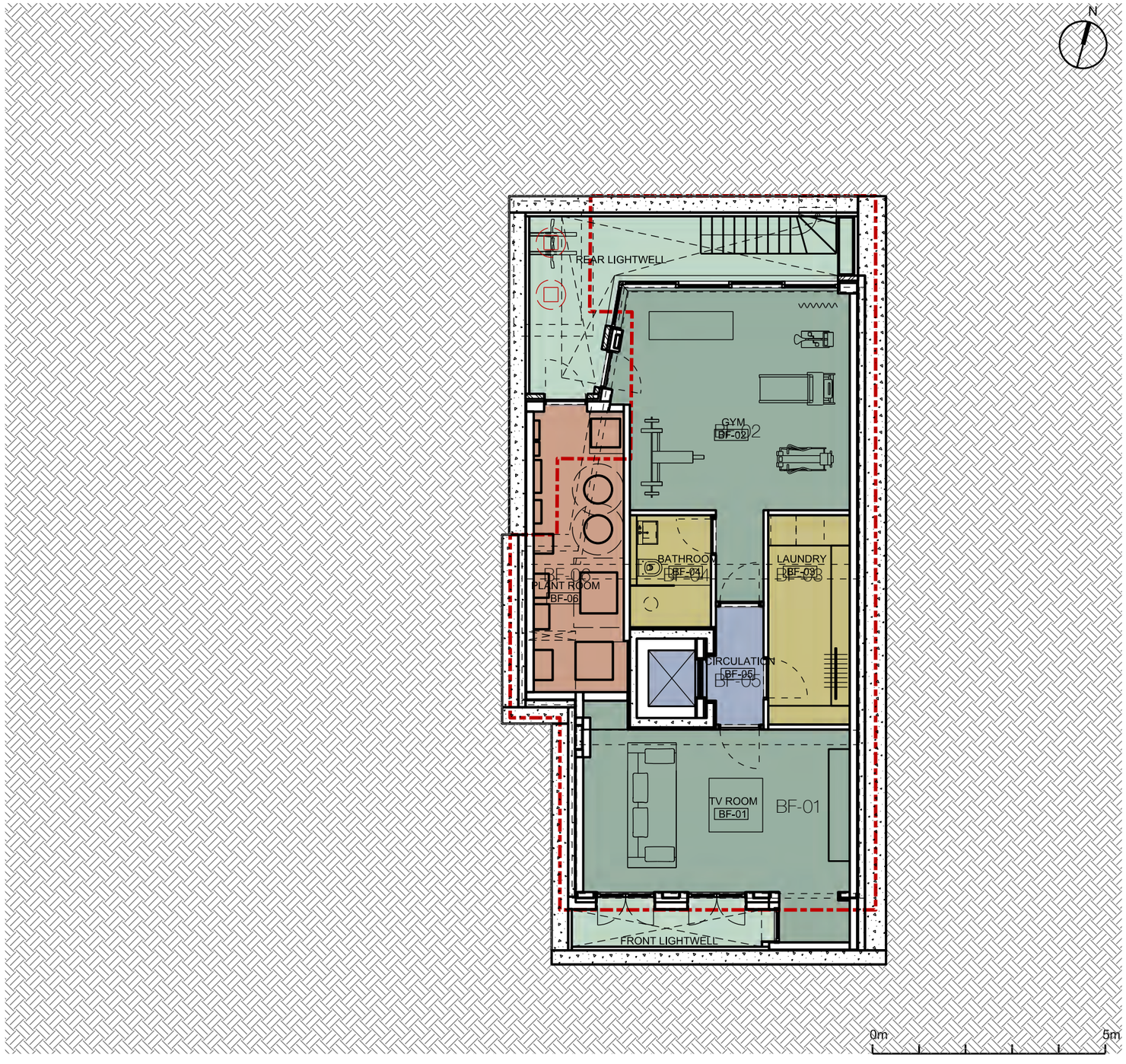
habitable spaces

external spaces

services

circulation

plant area



4.09 Proposed Plans

Ground floor plan

Areas

GF-01	Hallway	15 m²
GF-02	Office	33 m²
GF-03	Cloakroom	7 m²
GF-04	WC	3 m²
GF-05	Circulation	11 m²
GF-06	Rear Access	5 m²
	External Spaces	18 m²
GIA		74 m²
GEA		92 m²

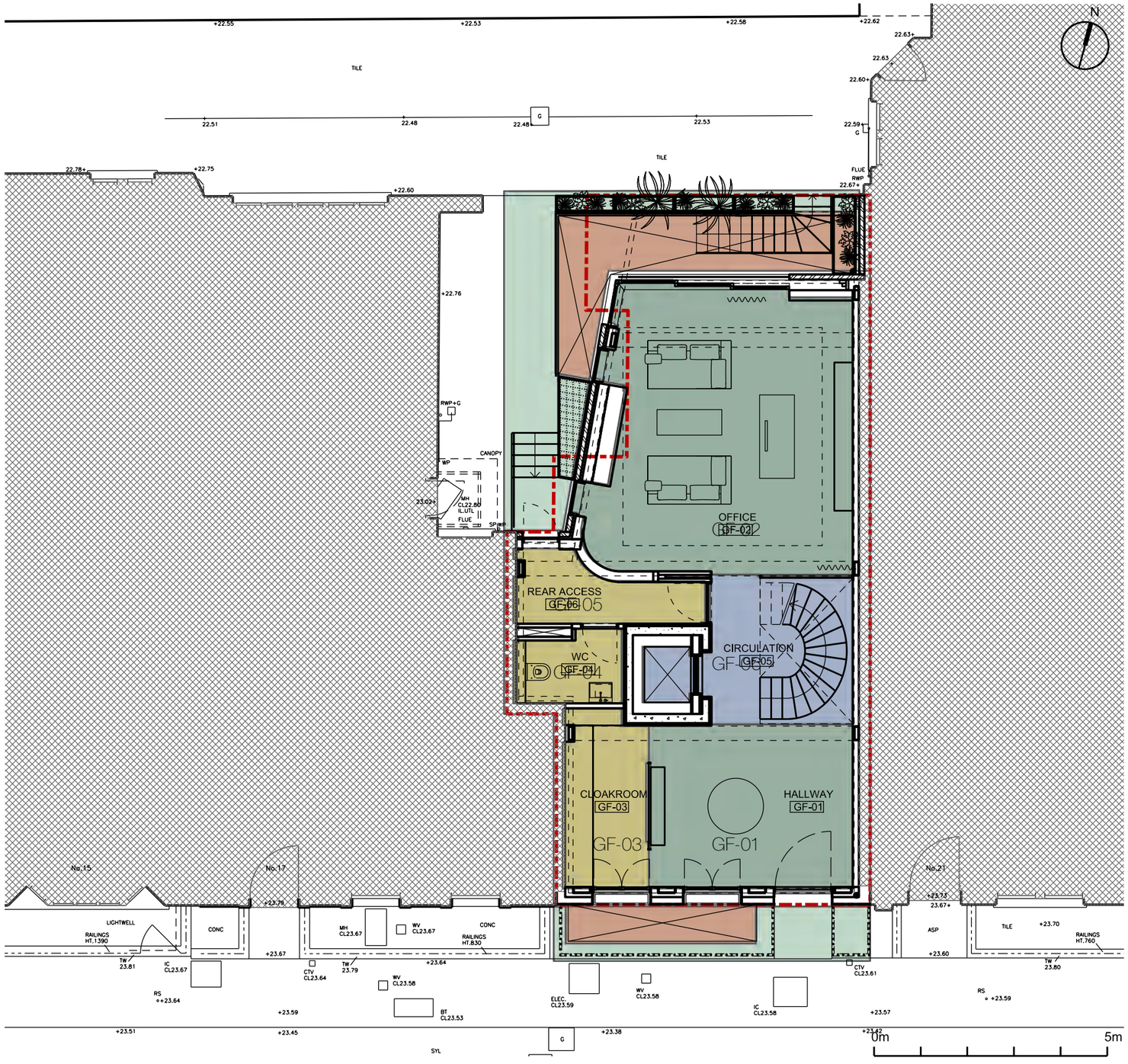
habitable spaces

external spaces

services

circulation

lightwell

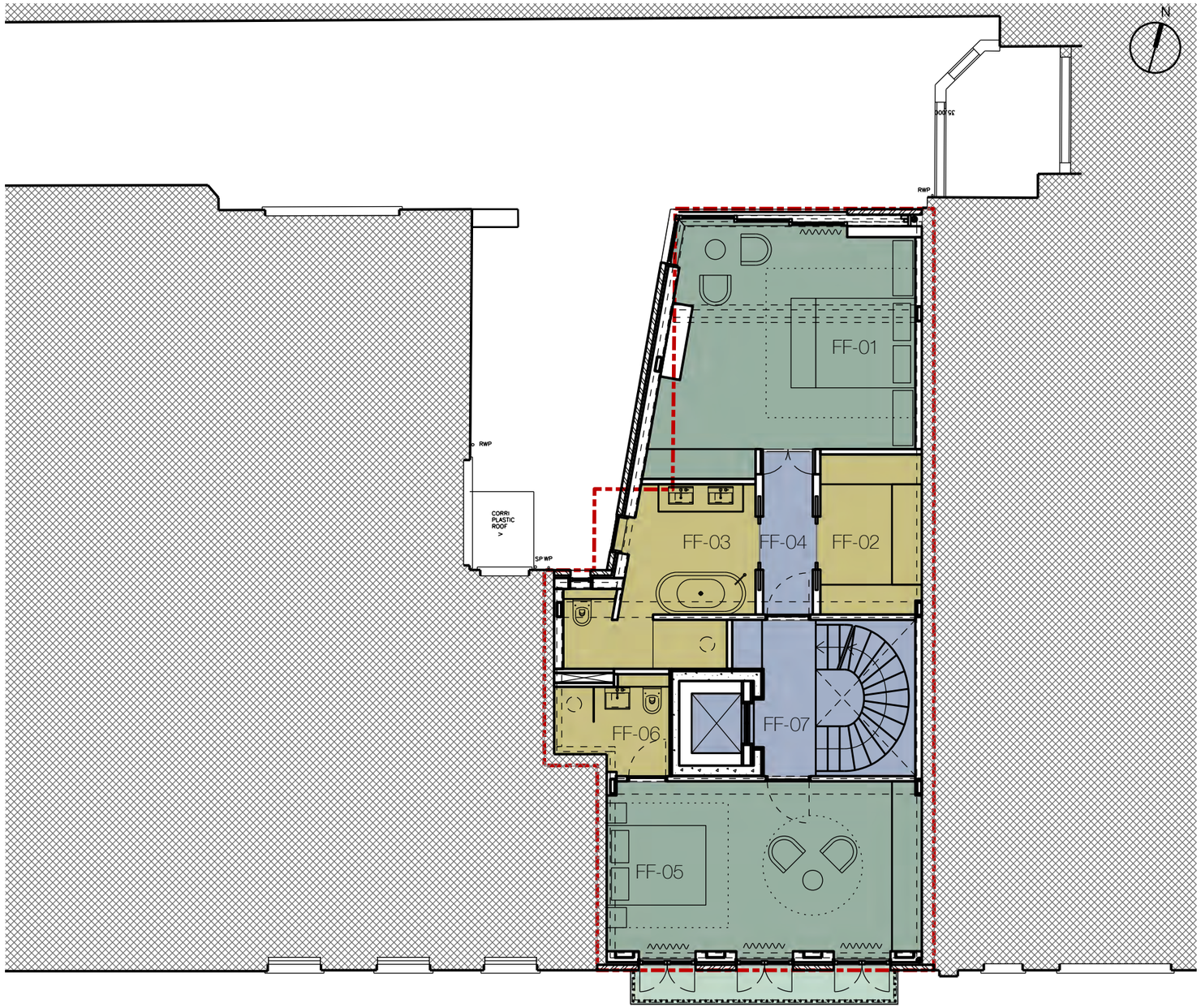


4.09 Proposed Plans

First floor plan

Areas

FF-01	Master Bedroom	23 m²
FF-02	Master Dressing	7 m²
FF-03	Master Ensuite	11 m²
FF-04	Master Circulation	4 m²
FF-05	Bedroom 02	22 m²
FF-06	Ensuite 02	4 m²
FF-07	Circulation	12 m²
	Balcony	4 m²
GIA		83 m²
GEA		105 m²



habitable spaces

external spaces

services

circulation

4.09 Proposed Plans

Second floor plan

Areas

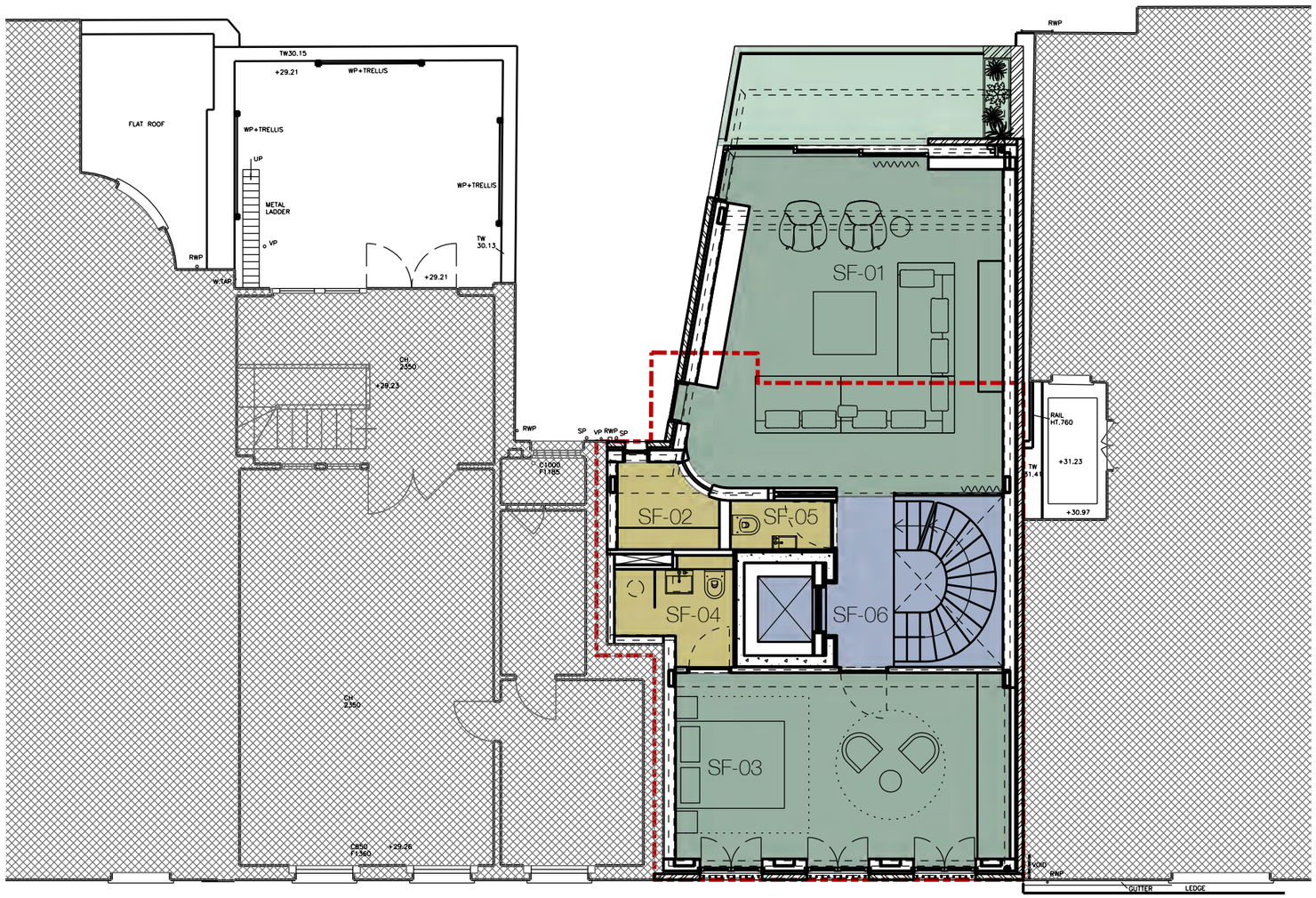
SF-01	Living Room	32 m²
SF-02	Bar	3 m²
SF-03	Bedroom 03	21 m²
SF-04	Ensuite 03	4 m²
SF-05	WC	2 m²
SF-06	Circulation	11 m²
	Balcony	9 m²
GIA		73 m²
GEA		102 m²

habitable spaces

external spaces

services

circulation



4.09 Proposed Plans

Third floor plan

Areas

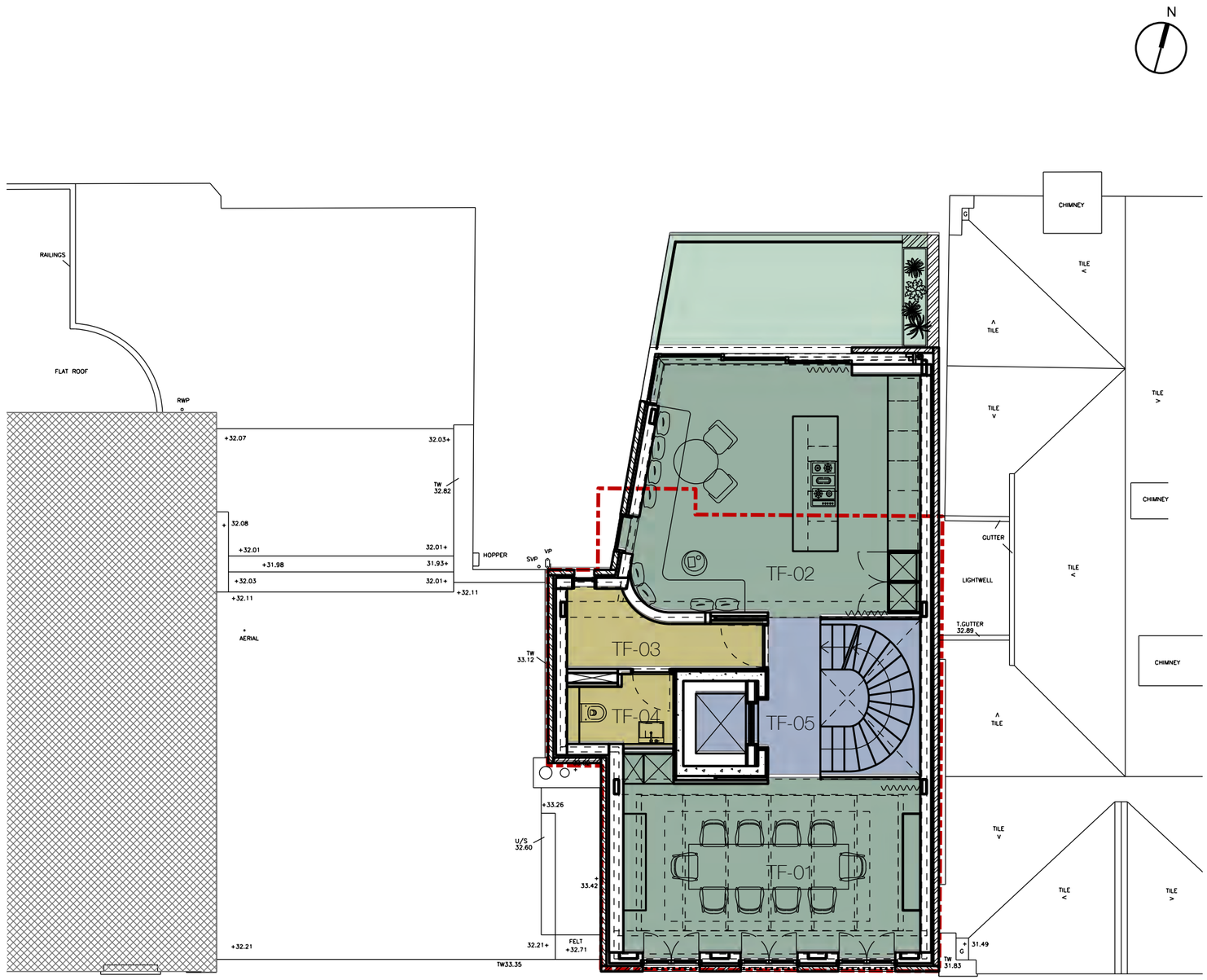
TF-01	Dining Room	22 m²
TF-02	Kitchen	28 m²
TF-03	Storage / Waste & Recycling	5 m²
TF-04	WC	3 m²
TF-05	Circulation	11 m²
	Balcony	12 m²
GIA		69 m²
GEA		98 m²

habitable spaces

external spaces

services

circulation

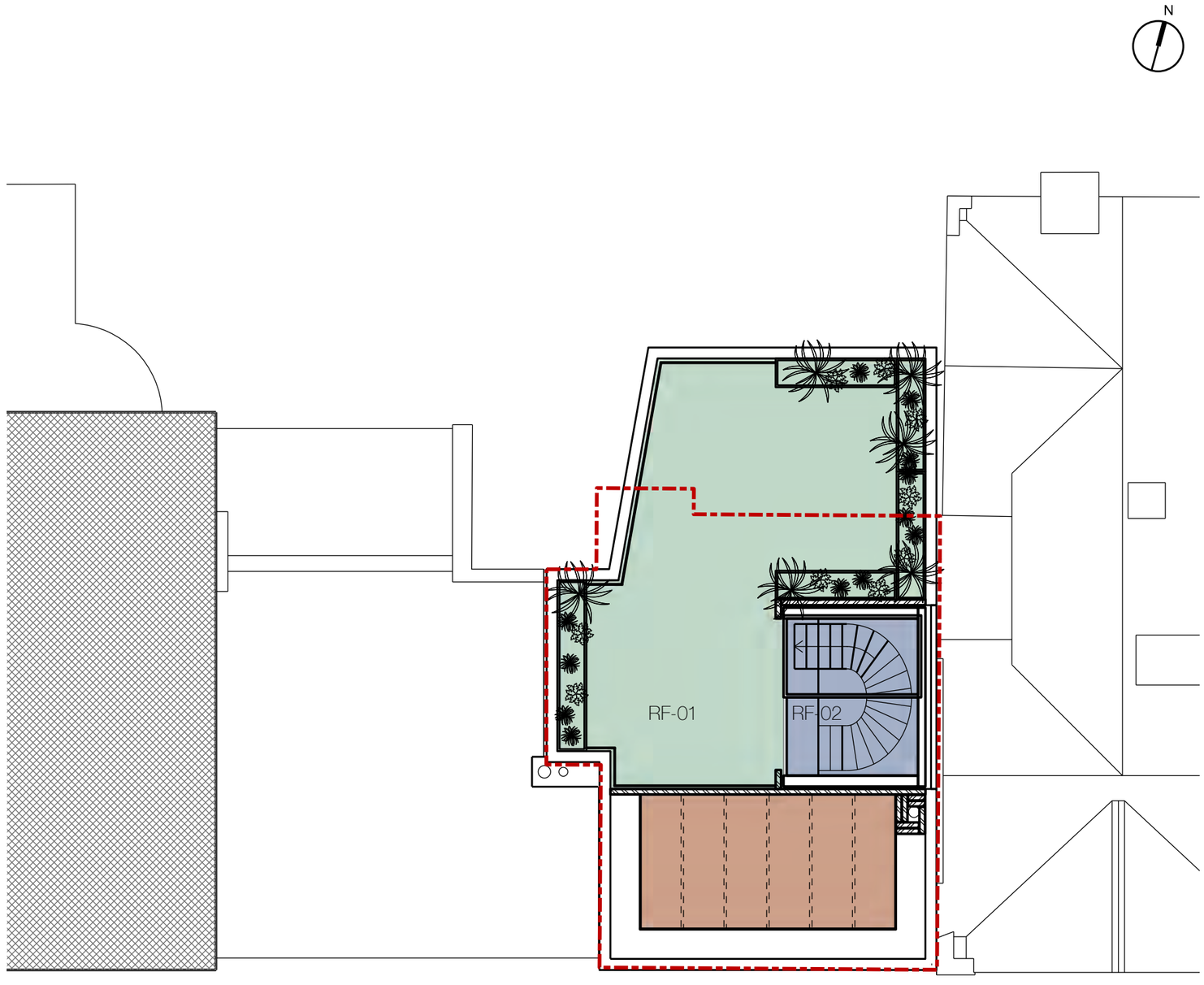


4.09 Proposed Plans

Roof floor plan

Areas

RF-01	Terrasse	45 m²
RF-02	Circulation	8 m²
GIA		8 m²
GEA		86 m²



external spaces

circulation

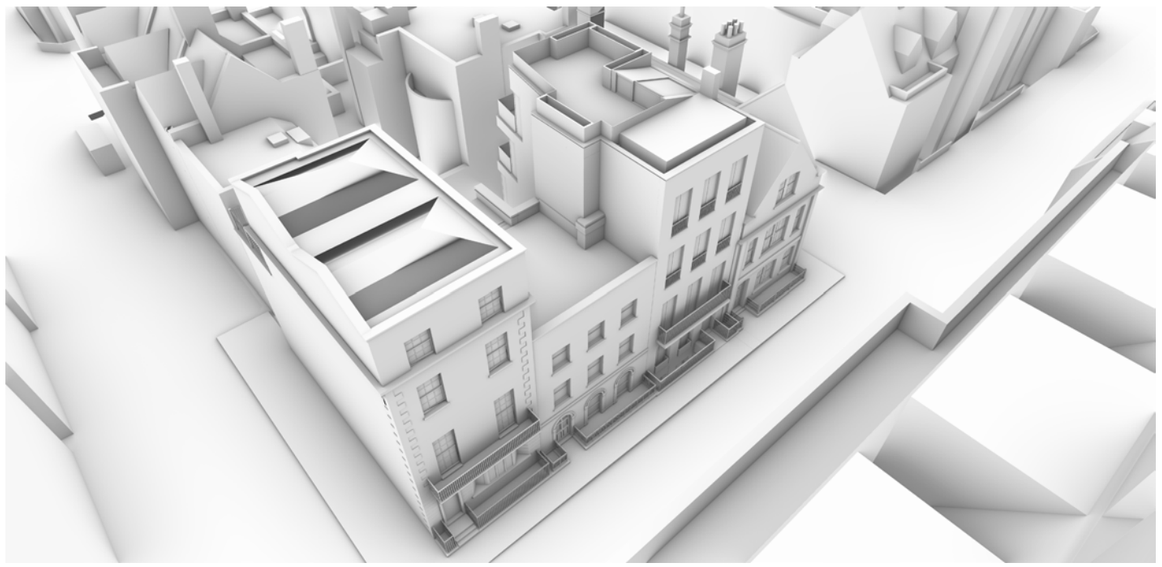
skylight

4.10 Proposed 3D Clay Render

View 01

View 02

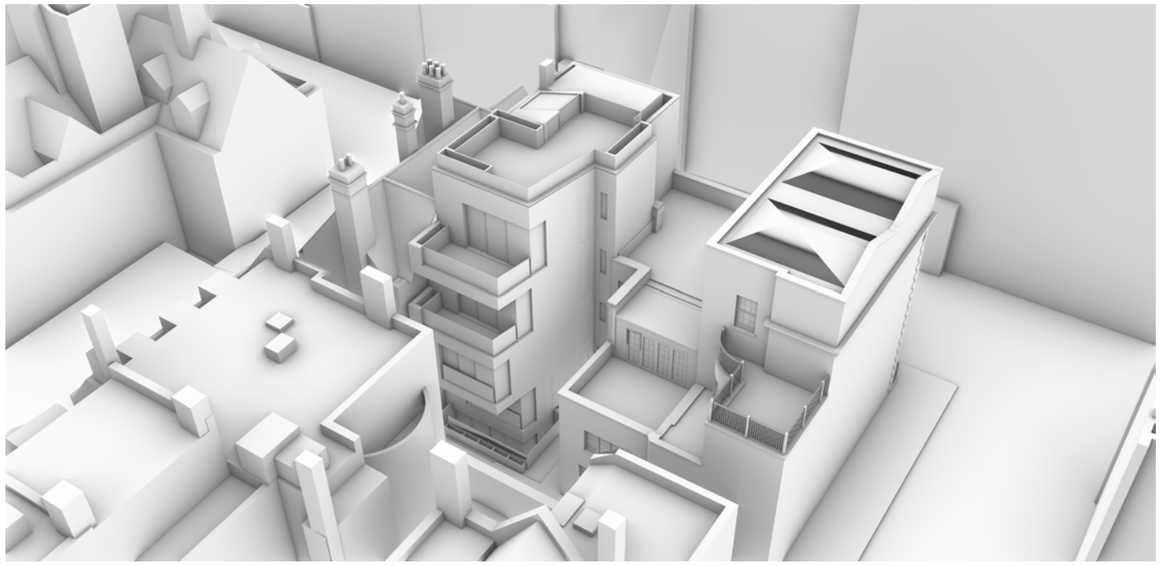
View 03



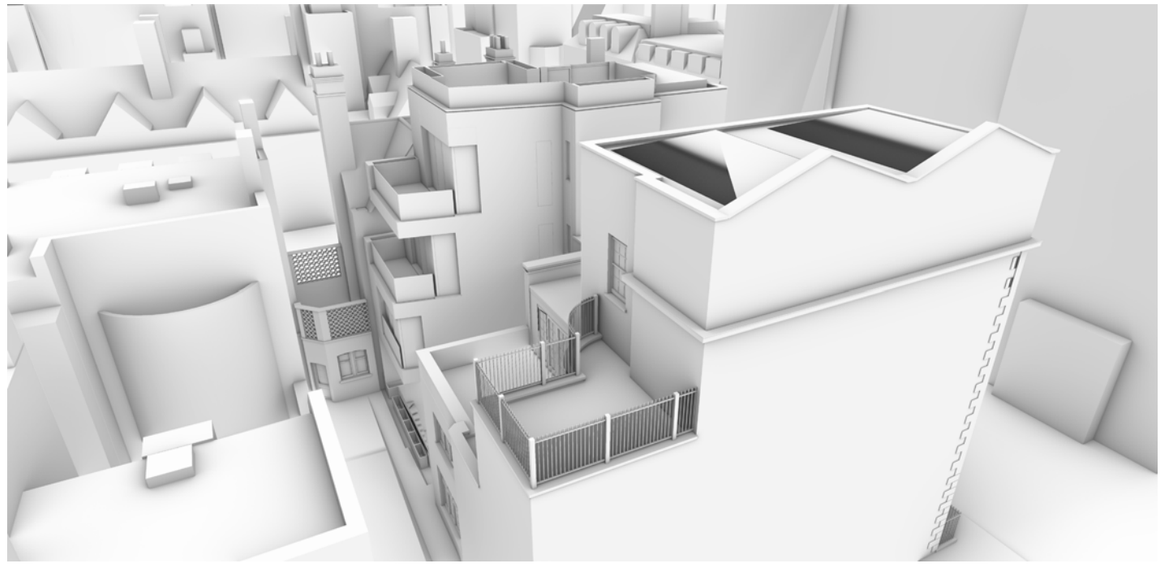
View 04

4.10 Proposed 3D Clay Render

View 05



View 06



4.11 Proposed Balsa Model

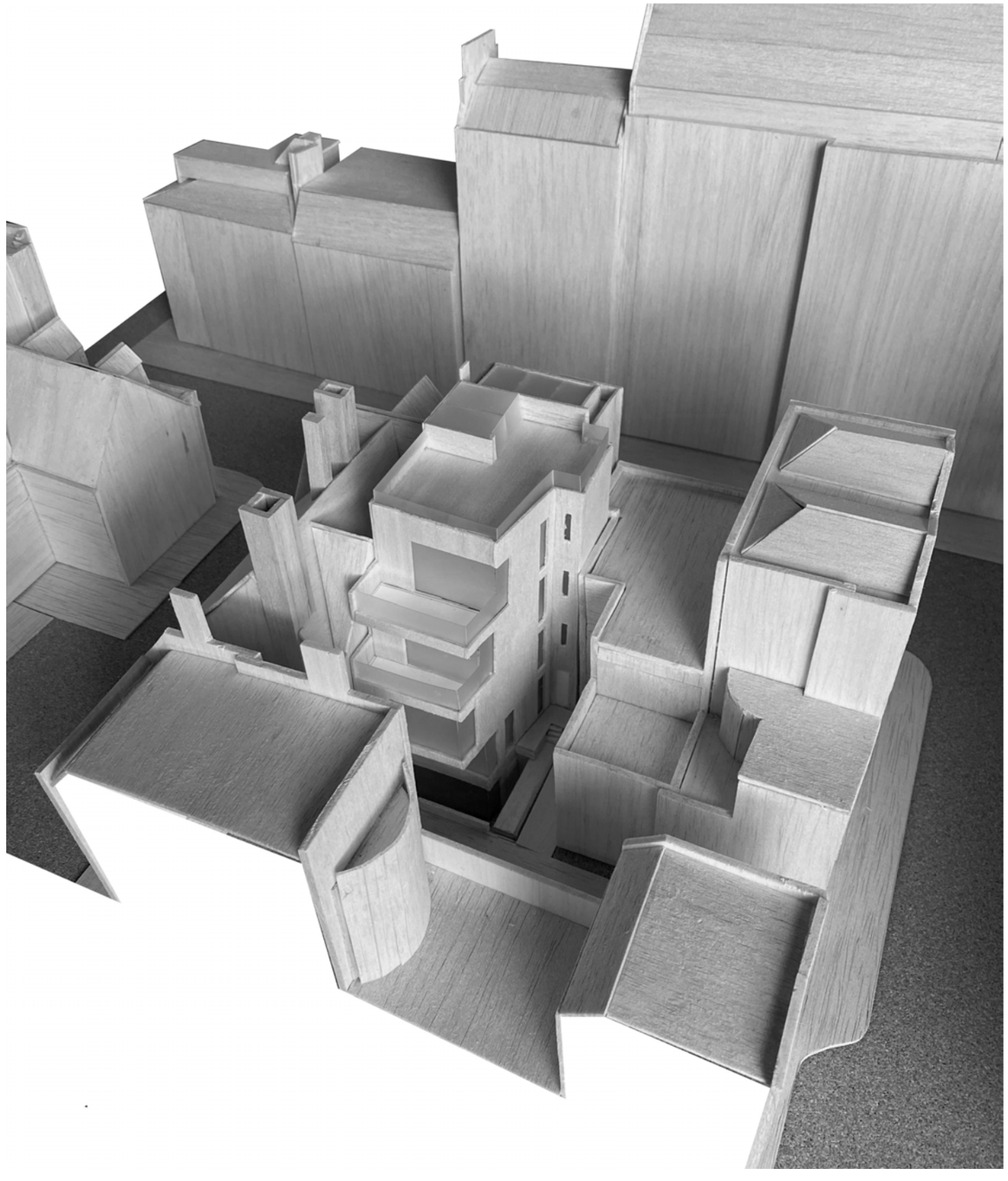
View 07

View 08

4.11 Proposed Balsa Model

View 09

View 10



4.12 Proposed Material Palette

Handmade Waterstruck Black and White brick

White portland stone

Dark bronze