

**APPENDIX 6: M&E Outline Services Strategy by MWL**

## 20-22 Theobald's Road M&E Outline Services Strategy



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# Contents

SCOPE .....	4
INCOMING SERVICES .....	4
Mains Water .....	4
Electricity .....	4
Telecoms.....	4
Gas.....	4
MECHANICAL INSTALLATION .....	5
Above Ground Drainage.....	5
Heating Services.....	5
Ventilation Services.....	5
Water Services.....	5
ELECTRICAL INSTALLATION.....	5
Electrical Supply and Distribution .....	5
Electrical Installations in Dwellings .....	5
Electrical Installation in Landlord's Areas .....	5
Telephones.....	5
Door Entry and Security .....	5
Smoke Detection .....	5

## SCOPE

This report provides an outline of the services strategy proposed for 20-22 Theobald's Road.

## INCOMING SERVICES

### Mains Water

Thames water is the network supplier in the area.

It is proposed that two bulk water supplies will feed the residential units, one for 20 Theobald's Road and one for 22 Theobald's Road.

### Electricity

UK Power Networks (UKPN) are the network operators in the area.

Extra High Voltage (EHV) cables rated at 66kv, high voltage (HV) cables rated at 11kv and low voltage (LV) cables rated at 400V are located in the area. Depending on the capacity of the existing connection (to be confirmed during the detailed design stage), it shall be retained or upgraded to match the new requirements.

### Telecoms

Telecommunication specialist shall provide a detailed design to deliver high quality fibre broadband connection to all residential units.

### Gas

There will be no gas provision to the residential units.

## MECHANICAL INSTALLATION

### Above Ground Drainage

The strategy for the above ground drainage, will be to use the existing soil stack locations, as to minimise any alterations to the fabric of the building.

### Heating Services

Heating to the residential units shall be via appropriately sized electrical heating elements, located within each room. There will be no boiler provision in order to avoid altering the façade (flues terminations).

Each room shall be capable of local temperature control.

### Ventilation Services

The residential units shall be ventilated via a decentralised MEV system. All bathrooms and kitchens shall be fitted with individual extract fan. The extract fans shall be ceiling mounted and ducted straight to the outside. The kitchen hobs shall also be supplied with recirculating cooker hoods, which require not penetrations to the outside.

Where possible, existing façade penetrations are to be utilised, to minimise alterations to the building fabric.

### Water Services

Both mains water supplies shall be boosted, via appropriately sized booster sets and break tanks. The equipment will be located within the vaults, below the sidewalk and will have individual meters for each unit. The boosted water shall feed all appliances with the units and also, all hot water cylinders.

Hot water to the units shall be provided via communal unvented electrical immersion hot water cylinders. The cylinders are to be located within the vaults, in the same space as the booster units. The systems shall be complete with a hot water recirculation pump, in order to provide instantaneous hot water to the taps.

## ELECTRICAL INSTALLATION

### Electrical Supply and Distribution

Each flat shall be supplied with an individually metered supply. Cables and multiway heads to individual meters will be supplied and installed by the chosen supplier; the electrical contractor will be required to provide all cable trays and containment.

### Electrical Installations in Dwellings

Consumer units to be located in the hallway. Standard domestic electrical power and lighting circuits using twin and earth cables.

Double socket outlets provided in all rooms for small power requirements. Multigang type grid switches to be installed for kitchen appliances. Power also provided for extract fans

Lighting to be provided to suit previous appearance of the listed building, using wall lights and pendant sets as appropriate.

### Electrical Installation in Landlord's Areas

Main switchgear and distribution boards to be located in dedicated electrical intake room. General purpose small power to be provided for cleaning (lockable sockets) and for supplying entry phone, CCTV and television installations, if required.

Lighting to be provided to common parts, generally using low energy LED fittings controlled using presence-detecting controls, with daylight cut-offs controls where appropriate. Emergency lighting to be provided to means of escape.

External lighting to be provided to all entrances and exits. All external lighting shall be provided with PIR and photocell control.

### Telephones

Openreach installation to be provided to all dwellings. Cables shall be free issued by Openreach for installation by contractor.

Distribution to be below ground in ducts and then to rise up within the communal stair core of the residential building to the flat.

### Door Entry and Security

All units to be provided with video door entry systems, with panels at each main entrance and monitors in units hallways. Resident access using key fobs and proximity readers at each main entrance.

### Smoke Detection

Fire alarm system to be provided to meet fire strategy requirements.