# PLANNING BRIEF for the MECHANICAL AND ELECTRICAL SERVICES at 99A FROGNAL LONDON NW3

15/10/2013



# 99A FROGNAL LONDON NW3 PLANNING BRIEF for MECHANICAL AND ELECTRICAL SERVICES

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# 1. INTRODUCTION

This planning brief has been produce for planning submission purposes and covers major plant where noise & location that requires planning permission.

#### 2. THE PROJECT

The project comprises of demolition of existing house and build a new single luxury family dwelling.

# 3. SCOPE OF ENGINEERING WORKS

Building Engineering Services:

• Mechanical services to include; space heating, ventilation, comfort cooling, hot and cold water services.

- Electrical services to include; mains intake, mains distribution, power, lighting, wiring system, emergency lighting, fire alarm, Security, TV/FM and telephone and data wiring.
- Sanitary plumbing and Rainwater.
- Underground drainage.
- Liaison with Utility service companies concerning new service provisions (excluding disconnections) where necessary.
- Liaison with AV/Home Entertainment specialist.
- Liaison with Lighting/Interior designer.
- Liaison with sustainability specialists.

#### 4. HEATING

The development will be served by centralised boilers to provide heating and hot water requirements. Boilers will be located in the lower ground floor plant room.

Cylinders to be provided with electric immersion backup.

Boilers to provide heating circuit for pool (requirements to be advised by pool plant designer)

Boiler flues to discharge via duct in shaft adjacent to staff accommodation/lift. Boiler intakes via shaft/vent to plant room. Plastic flue system to be used. Access for inspection to be provided via lower ground floor garage.

Heating to be provided by underfloor heating, radiators & towel rails.

Manifolds to be located on each floor in accessible location.

Towel rail circuit to be provided with independent time and temperature controls.

House to be divided into 3 or more heating zones, with independent time and temperature controls.

#### 5. VENTILATION

Basement to be served by whole house ventilation system to serve gym, commercial kitchen, cinema/games, changing, wine cellar/tasting, storage room. Intake and exhaust ducted to external.

All bathrooms, utility rooms and kitchens on upper floors shall be ventilated with intermittent extract fans ducted to outside. Background ventilation via trickle vents by Architect.

Flat duct shall be used, run horizontally in ceilings. Termination points to be indicated by the Architect, generally on flank walls or to roof.

Plant room shall be provided with fresh air supply fan and supply & extract ductwork. Allow for fan controls and interlock with boiler controls.

Ventilation to be provided to boiler room to provide ventilation for:

- Gas pipework
- Boilers

Riser

Ventilation grille in top and bottom of riser for prevention of heat build-up. Riser to be fire rated shaft.

Pool

Ventilation by pool specialist.

#### 6. GAS

A new gas service to be provided to the development.

New meter to be provided in meter housing in front garden.

Pipework before meter shall be by Gas shipper. Gas in dwellings to serve boilers, hobs feature fireplaces.

#### 7. COMFORT COOLING

Fan coil units to be accommodated in ceiling.

Comfort cooling units to be concealed and provided with ducting and supply & extract grilles.

Allow for access panels to units and condensate pumps. Where possible, units will be located in adjacent rooms and ducted.

Grilles to be concealed wherever possible in vertical coffers and pelmets. Slot diffusers to be used elsewhere.

Insulated ducted supply to grilles. Return air via ceiling plenum.

Refrigerant pipes shall be run on plastic coated tray.

Condensate runs to be trapped using Hep VO traps.

Outdoor units to be located in an acoustic enclosure north west corner rear of site. VRV (confirm proposed unit). All silencers and louvres to be specified by Acoustic Specialist. Refer to specialist Acoustic Report.

# 8. LIGHTING

Light fittings to be low energy and located in habitable areas.

All lighting shall be programmable and controlled by user control in each room. Each floor provided with dimmer rack, fed from local distribution board.

Lighting scheme to allow flexibility for subsequent Client changes after handover.

# 9. SECURITY SYSTEMS

The proposals for the security systems by Specialist.

These generally to comprise;

- Access Control CCTV
- Door access control system
- PIR's, Intruder alarm system
- Redcare
- Panic Buttons

# 10. FIRE DETECTION AND ALARM

Fire alarm and detection systems to meet current regulations. Fire strategy to be advised by

Architect.

Installation shall be by specialist suppliers/installer.

#### 11. TV/SATELLITE

A new TV and radio aerial/satellite dish to be installed on the roof in a unobtrusive location,subject to specialist survey. .

Amplification equipment and distribution to provide TV/DAB/Sat services at all outlets.

# 12. ACOUSTIC SURVEY/REPORT

Acoustic survey/report by others to discharge planning conditions. Requirements to be advised by Acoustic Specialist.

13. SWIMMING POOL

Pool plant by specialist. Boiler requirements TBC.

#### 14. DRAWINGS

- M1 Basement level plant area and service riser
- M2 Ground floor services
- M3 First floor services
- M4 Second floor services
- M5 Roof plan

# **REYQ30,32P8**

10 or more



When installing the units most appropriate pattern should be selected from those shown above in order to obtain the best fit in the space available always bearing in mind the need to leave enough space for a person to pass between units and wall and for the air to circulate freely. (If more units are to be installed than are catered for in the above patterns your layout should take account of the possibility of short circuits.) The units should be installed to leave sufficient space at the front for the on site refrigerant piping work to be carried out comfortably. 4

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REMQ14P8 REMQ16P8 Outdoor unit REMQ16P8 REM016P8 Outdoor unit

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