

Drury Works, Drury Lane, London

Ventilation Strategy Statement



April 2023

1623/5/MT/Rev A

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Quality Control Status

Engineering Draft by: A Shilliday

Checked by: M Taylor

Status (**Planning**): April 2023

Admin by: S Doyle

1.0 Introduction

The project comprises the partial demolition of existing building at level 4, rooftop extension to create 5 storeys for commercial uses (use class E), new internal arrangements at ground floor to create a stand alone retail unit (use class E) and a self-contained ground floor office.

This statement has been prepared to confirm to the Planning Authority that the design of the supply and extract ventilation systems for the development will provide a low energy, high quality ventilation solutions for internal spaces whilst avoiding adverse impacts on the external environment and any adjoining properties.

The statement does not provide the exact detail of how the ventilations systems are to be installed and operated. These details will be developed as part of the design process. This statement provides a structure for the detailed design development process and provides confirmation that the supply and extract ventilation systems will achieve the objectives set out hereafter.

2.0 Summary

The proposed ventilation strategy has been developed to provide ventilation solutions for internal spaces for each usage as follows:

- Ground Floor Retail Unit – Local dedicated supply and extract ventilation with heat recovery
- Back of House – Local dedicated supply and extract ventilation with heat recovery
- Office floors 1 to 5 – Local dedicated mechanical ventilation heat recovery units
- Plant rooms & specific areas such as bin stores etc. – Local dedicated extract ventilation

2.1 Odour Abatement

There are no catering facilities and no odour producing activities within the building, therefore there is no require for odour abatement.

3.0 Proposed Ventilation Strategy

3.1 Ground Floor Retail Unit and Ground floor office unit

Local dedicated supply and extract heat exchange unit will be provided to serve the retail unit. Filtered and tempered supply air will be distributed from the MVHR units via ductwork systems located within strategic service zones to the rear of air conditioning fan coil units located at high level. Air from these levels will be extracted via local terminal devices and distributed via ductwork systems located within strategic service zones to the MVHR.

Heat recovery MVHR devices will be provided on extract air systems to recover heat which shall be used to pre-heat fresh air, thus reducing energy consumption.

Air inlets and air outlets have been located on the façade at ground floor level, refer to appendix for indicative locations.

The design will include atmospheric side and system (room side) attenuators to both control internal noise levels in accordance with Chartered Institution of Building Services Engineers (CIBSE) requirements and external noise transmission in accordance with the planning requirements set out in the Acoustic Survey.

3.2 Back of House

The back of house areas will be provided with mechanical supply and extract ventilation from a dedicated supply and extract heat recovery units located within a specific void zone to serve the space. Filtered and tempered supply air will be distributed from the MVHR via ductwork systems located within strategic service zones either to the rear of each fan coil unit located within ceiling void or directly to the space. Air from these areas will be extracted via local terminal devices and distributed via ductwork systems located within strategic service zones to the AHU.

Heat recovery will be provided on extract air systems to recover heat which shall be used to pre-heat fresh air, thus reducing energy consumption.

Air inlets and air outlets have been located on the façade at ground floor level, refer to appendix for indicative locations.

The design will include atmospheric side and system (room side) attenuators to both control internal noise levels in accordance with Chartered Institution of Building Services Engineers (CIBSE) requirements and external noise transmission in accordance with the planning requirements set out in the Acoustic Survey.

3.3 Office Floors – First to Fourth

Each individual floor level first to fourth will reuse existing dedicated mechanical supply and extract ventilation.

Existing air inlets and air outlets located on the rear façade at first to fourth floor will be reused and retained.

The on floor system will be supplemented to add heat recovery plus incorporate filtration and attenuation as required reusing the existing ducted distribution within the ceiling void , the heat recovery unit will be installed above the toilet accommodation.

All ventilation rates shall be designed in accordance with the Building Regulations requirements and CIBSE guidance and shall be tested and commissioning in accordance with CIBSE Commissioning Codes as applicable.

3.4 Office Floor – Fifth

The new fifth floor will be fitted with new on floor dedicated mechanical supply and extract ventilation using a central MVHR unit.

New air inlets and air outlets located on the rear façade at fifth floor will be match the louvres on the floors below.

The on floor system will incorporate heat recovery, incorporate filtration and attenuation as required with new ducted distribution within the ceiling void similar to the floors below, the heat recovery unit will be installed above the toilet accommodation.

All ventilation rates shall be designed in accordance with the Building Regulations requirements and CIBSE guidance and shall be tested and commissioning in accordance with CIBSE Commissioning Codes as applicable.

3.5 Bin Store, Plant Rooms and Toilets

These areas will be provided with dedicated extract ventilation providing ventilation rates in accordance with CIBSE Guidelines and Approved Document F.

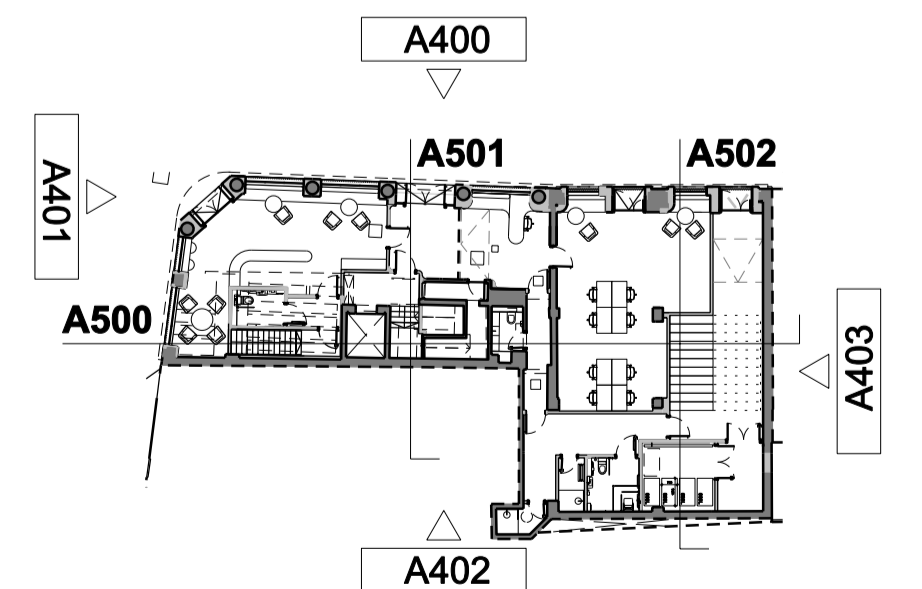
Air will be extracted via local terminal devices and distributed via ductwork systems located within strategic service zones to the extract fans.

Appendix A – Elevation Markup

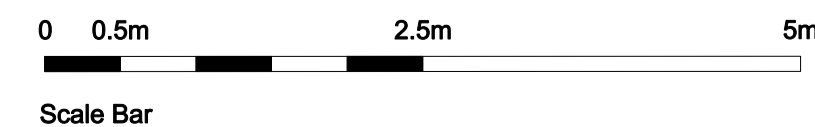





- Structural engineer to confirm any retained and/ or proposed structure location and size

- FFL TBC pending opening up works

[illegible]

1. ALL DIMENSIONS IN MM UNLESS OTHERWISE STATED
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT CONTRACT DOCUMENTS
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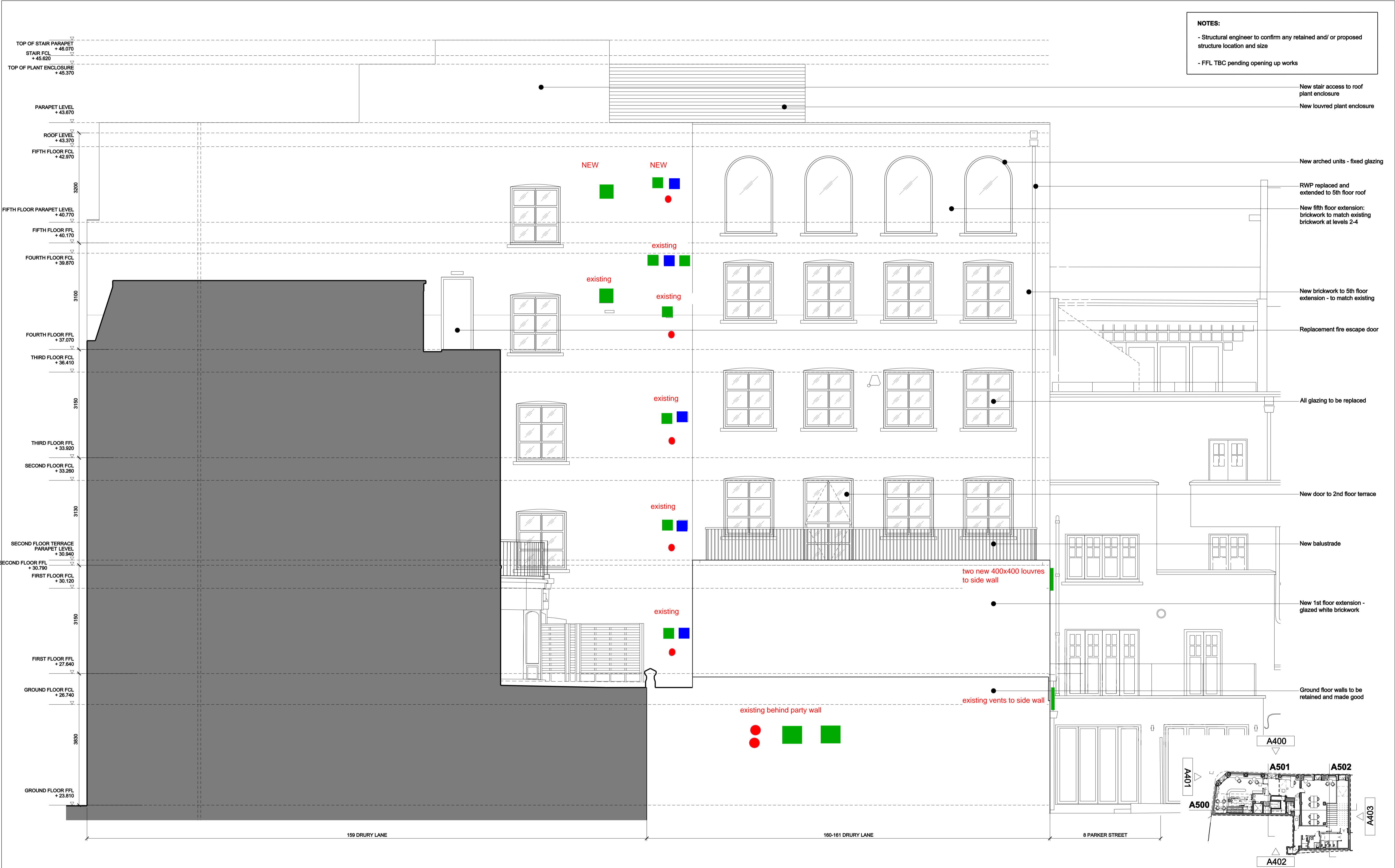
-  general vent
-  supply air vent
-  extract air vent

JOB NO:	22-034
SCALE:	1:100 @ A3 1:50 @ A1
STAGE:	STAGE 2

DRAWING NAME: **PROPOSED SOUTH WEST ELEVATION**
Louvre mark up - DRURY LANE

PROJECT NAME: DRURY LANE - MRP

DRAWING NO: **A401/-**



REV.	DATE	DESCRIPTION	REV.	DATE	DESCRIPTION
-	24.03.2023	FIRST ISSUE			

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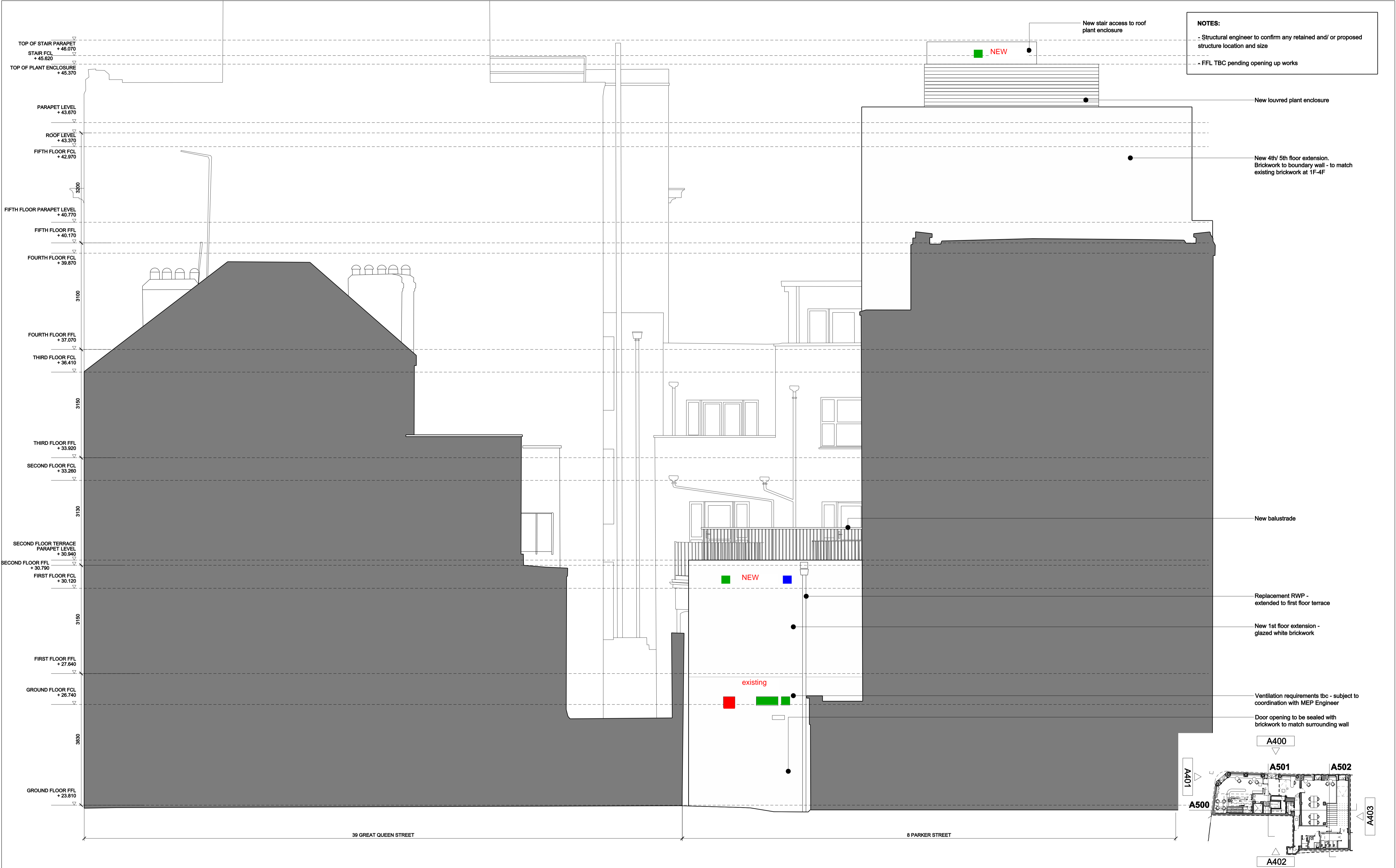
KEY:

0 0.5m 2.5m 5m

Scale Bar

general vent	supply air vent	extract air vent

DRAWING NAME:	PROPOSED SOUTH EAST ELEVATION - REAR FACADE
PROJECT NAME:	DRURY LANE - MRP
DRAWING NO:	A402/-
JOB NO:	22-034
SCALE:	1:100 @ A3 1:50 @ A1
STAGE:	STAGE 2



REV.	DATE	DESCRIPTION
-	24.03.2023	FIRST ISSUE

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KEY:

0 0.5m 2.5m 5m
Scale Bar

general vent
supply air vent
extract air vent

JOB NO: 22-034
SCALE: 1:100 @ A3 1:50 @ A1
STAGE: STAGE 2

DRAWING NAME: PROPOSED NORTH EAST ELEVATION - REAR FACADE
PROJECT NAME: DRURY LANE - MRP
DRAWING NO: A403/-