PLANNING APPLICATION

COVERING THE

MECHANICAL, ELECTRICAL SERVICES

FOR THE REFURBISHMENT WORKS

AT

TANKERTON WORKS 12 ARGYLE WALK LONDON WC1H 8HA

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1	01.07.2015	Changed equipment locations and add PV equipment	MFBP	JPR

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1. GENERAL

1.1 INTRODUCTION

This document covers the proposed upgrade works to the buildings heating, cooling and lighting installation.
The existing building was constructed in the 19th century as a factory outlet and was converted in circa 2004 to office premises at ground and first floor levels with storage at basement level.

1.2 GENERAL SCOPE OF WORKS

The general scope of works requires the removal of the existing portable heating and cooling units. These systems are to be replaced by a 3 pipe heating and cooling system using a VRF condenser system with wall mounted indoor units covering basement and first floors with ceiling mounted cassettes at ground floor.

The seven condenser units will be located on the roof of no 12A, at the west side of the building, to serve all the indoor units. This system will operate for normal office hours, 0800 to 1800, five days a week with an optional override should limited overtime workings be required.

The background has been recorded at 45db so acoustic enclosures will be required.

A mechanical ventilation and heat recovery unit will be installed in the basement area as the remedial works to the building will provide a conference area and possible office space.

A six panel photovoltaic power system, producing some 2kW, will be installed on the flat roof area between the two existing rooflights and will be angled at 5° to the horizontal. The power generated will be injected into the existing distribution panel at ground floor level.

The resultant effect of the proposed upgrades to the building has improved the energy efficiency and emission rated by circa 45.7% and 44.2% respectively. The actual figures show the following:

Existing Building – energy efficiency Band F at 129.51 and the building emission rate ($kgCO2/m^2$) of 147.

Upgraded building – energy efficiency Band D at 70.41 and the building emission rate ($kgCO2/m^2$) of 82.