

JM 2022/08/05

Presentation Convent, Clondalkin Mechanical, Electrical & Lift Transport Services Planning Statement

Introduction

The following statement outlines the intended provision of mechanical, electrical and lift transport services in the renovation of the Presentation Convent, Clondalkin, Dublin 22. It is recognised that this is a protected structure and as such new service routes will be carefully considered to minimise damage to the existing building fabric. Works will be carried out in line with good conservation practice.

Mechanical Services

It is proposed to replace and upgrade the existing mechanical services as necessary in the convent building as the existing services, though serviceable, are at the end of their useful life and are not appropriate for the new use now proposed.

It is proposed that new heating and domestic water systems will be installed throughout the areas to be refurbished. A new relocated boiler plant room will be provided by re-purposing the existing lift plant room, which is to be made redundant by the provision of a new lift in a newly formed lift shaft. The old shaft presents the opportunity for vertical service distribution and as such pipework will be run vertically in the shaft and distributed horizontally across each level, exposed at high level along circulation routes (see Fig. A below). This strategy minimises any interventions within the existing building fabric.

There will be mechanical ventilation required to a number of spaces in order to maintain air quality and remove odours and moisture from the building. The routing of any ductwork and termination points to the outside will be carefully considered and it is proposed to terminate services in the existing lift shaft and flat roofs or in the internal courtyard, where they can't be seen from the exterior of the convent.

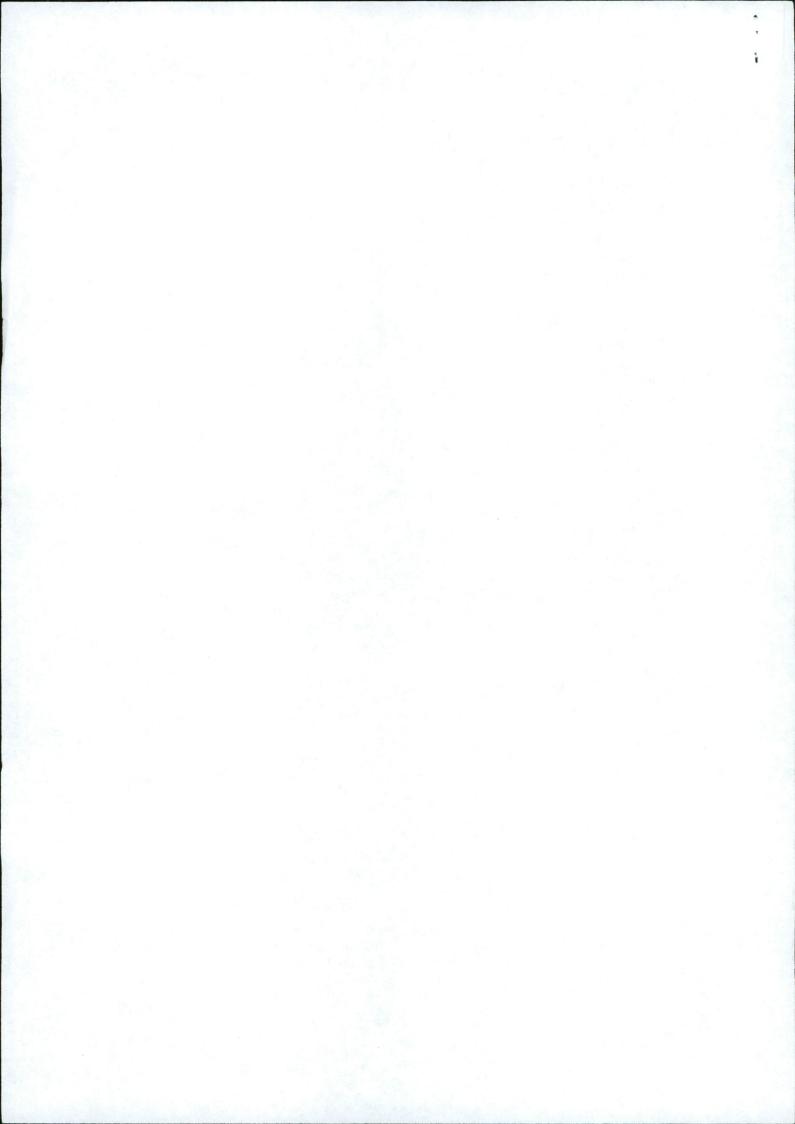
Electrical Services

It is proposed that the existing electrical systems in the convent will be upgraded, extended and replaced as necessary in order bring them up to current standards and to suit the new purpose and changes to the internal layout of the convent.

Electrical distribution boards will be housed in fire rated enclosures where they are located on escape routes. Any additional electrical containment required will be routed in a similar manner to the pipework, vertically in the existing lift shaft and distributed horizontally across each level, exposed at high level along circulation routes (see Fig. A below).









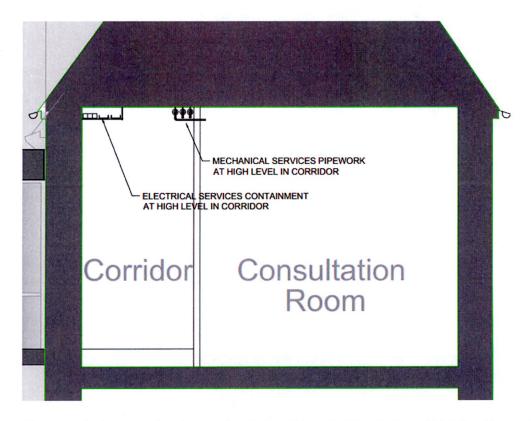


Fig A – typical section showing mechanical and electrical distribution at high level in corridor

The existing life safety systems (emergency lighting and fire alarm) appear to be in good order but it is envisaged that a number of modifications and extensions will be required to suit the proposed building layout.

The general lighting installation will be replaced in order to suit the new layout and use of the spaces within the building.

Lift Transport System

The existing lift is at the end of its usable life and is not in line with current standards. It is to be replaced by a new lift to be installed in a newly formed shaft in the courtyard. The new passenger lift will comply with EN-81 & Part-M of the building regulations.





