

6

Architecture

6.3

Whole building systems

6.3.1

Roof Strategy

Existing Civic Centre Building

The majority of the roof areas of the existing building have a cold roof build-up with pot and beam plus a screed forming the falls finished with an asphalt and felt covering.

The roofs are to be fully refurbished with a warm roof system made up of insulation and high performance waterproofing, maintaining existing falls. All rainwater outlets are to be replaced.

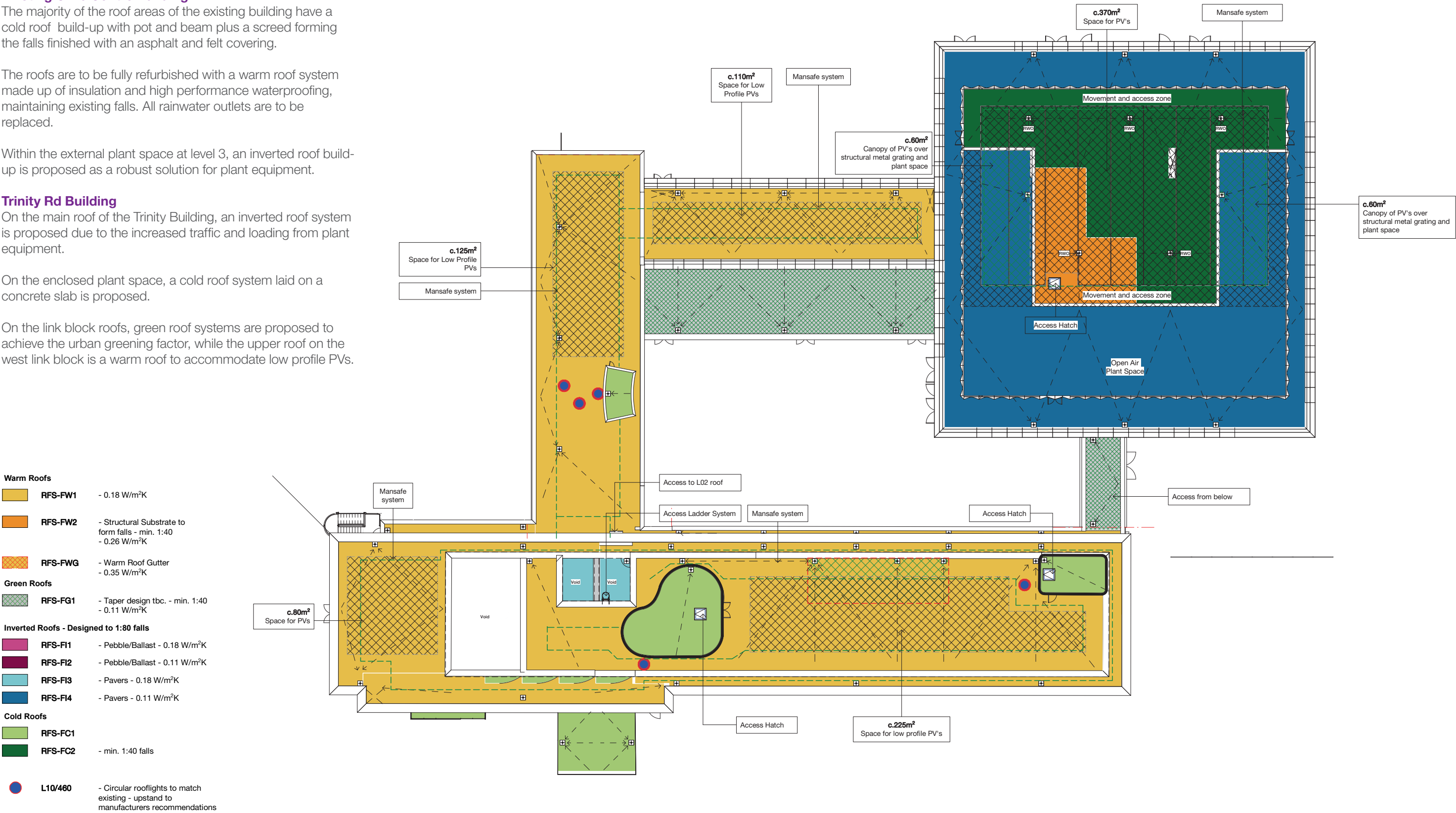
Within the external plant space at level 3, an inverted roof build-up is proposed as a robust solution for plant equipment.

Trinity Rd Building

On the main roof of the Trinity Building, an inverted roof system is proposed due to the increased traffic and loading from plant equipment.

On the enclosed plant space, a cold roof system laid on a concrete slab is proposed.

On the link block roofs, green roof systems are proposed to achieve the urban greening factor, while the upper roof on the west link block is a warm roof to accommodate low profile PVs.



6

Architecture

6.3

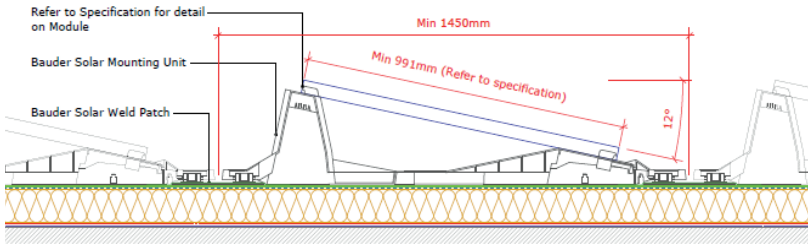
Whole building systems

6.3.2

PV Strategy

Low Profile Solar PV Modules

Several areas on the existing Civic Centre Building and on the west link block there is a low parapet/up-stand, meaning lower profile PV modules are required to minimise the impact on the building's appearance.



Low Profile Solar PV Modules Typical Detail

Regular Solar PV Modules

In other areas where there is a parapet, such as the roof space directly above the Civic Chamber and Annex roof, regular solar PV modules provide a greater efficiency.

