8. TECHNICAL RESOLUTION

INTRODUCTION
Chapter 8 illustrate the integration of the technological approach, design and construction.

8.1 PLANS
Figure 8.2: GROUND FLOOR PLAN

Figure 8.3: FIRST FLOOR PLAN
8.2 DOCUMENTATION
8.2.1 SECTION AA
Figure 8.8: DETAIL A2

- 250x45x10 mm Mild steel column
- 25x25 mm Mild steel square hollow section ribs
- New balustrade with foot rest [see detail]
- Cold formed galvanised mild steel gutter box complete with 30x30 M10 grating inlay
- Composite concrete deck with screed sloping towards gutter
- 120x146x8 mm Mild steel support beam mechanically fixed to existing structure
- M10 expansion bolt fixed to existing concrete structure
Figure 8.9: Building view 1
8.2.2 STAIRCASE

Figure 8.10: Staircase detail S2

Figure 8.11: STAIRCASE PLAN 1:50
Figure 8.12: Staircase detail s1

- 25x25x2mm Mild steel rectangular hollow section balustrade frame
- 3mm perforated metal sheeting
- 3mm perforated metal sheeting mechanically fixed to 25x25x2mm mild steel angle
- 25x25x2mm Mild steel angle mechanically fixed with M6 expansion bolt to concrete tread
- 120x100x8mm IPE support beam
- Wrapping concrete rib mechanically fastened to IPE with 25x25x2mm mild steel angle
- 120x20x3 Mild steel hollow core rectangular stringer
- Precast concrete treads mechanically fastened to rectangular sections with M6 bolts
- Precast concrete stair forming wrap around seating

SECTION SS1 1:50

New staircase intervention forming seating space
12mm Plexiglas Satinice baluster bent to specification form, fastened with 5mm countersunk square bolt

5mm perforated metal infill sheeting mechanically fixed to 25x25x2mm mild steel angle

150x120x15 mm Textured concrete infill screw

12x55x3 Mild steel hollow core rectangular stringer

25x25x2mm Mild steel angle mechanically fixed with M6 expansion bolt to concrete tread

12x100x6mm IPE support beam

Pre-cast concrete stair forming wrap around seating

Figure 8.14: SECTION SS2_1:50

Figure 8.15: Exploded stair tread
8.2.3 SECTION CC
8.2.4 WALL SYSTEM

Figure 8.17: Market station view
Figure 8.18: Active edge render 1
Figure 8.20: DETAIL

Main structural frame
100x50x3mm mild steel rectangular tubing

Exterior surface cladding
3mm perforated metal sheeting

Vertical sub structure
50x50x3mm mild steel hollow square section welded to main structural frame

Figure 8.21: MARKET WALL

Plan 1:50

Table element for informal trading

12mm Fibreglass出した infill panels

(Yellow U6)

Above bulkhead structures with concealed downlighters provide internal lighting and external glow

Main structural frame
100x50x3mm mild steel rectangular hollow section

The wrapping element serve different ways of walling such as leaning

Elevation/Section 1:50

Seating element
Timber inlay panels

Seating element
25x42x3mm mild steel hollow sections welded to 50x50x3mm square hollow support sections.
Figure 8.22: Seating and market station render

Figure 8.23: Seating view

Figure 8.24: Seating element
Figure 8.24: Seating element

Figure 8.25: Active edge render 2
8.2.6 BALUSTRADE

50x40x3mm Tapered mild steel tee posts
25x25x3 mm Mild steel rectangular hollow section horizontal ribs
25x25x3 mm Mild steel rectangular hollow section foot rest welded to the horizontal rib balustrade
12mm Safety glass handles bonded to specific profile mechanically fixed with 5mm countersunk bolt to horizontal ribs
25x25 mm Mild steel rectangular hollow section horizontal ribs
25x25 mm Mild steel rectangular hollow section foot rest welded to the horizontal rib balustrade
25x25 mm Mild steel rectangular hollow section horizontal rib balustrade welded to mild steel tee posts

Figure 8.26: BALUSTRADE DETAILS