Design fragment: 3D Aspect

Complex Projects Graduation Studio_Future vision of the Southworks area_Polyxeni Elissavet Travlou_sn4256328
Urban fragment

Complex Projects Graduation Studio_Future vision of the Southworks area_Polyxeni Elissavet Travalou_sn4256328
Exploded axonometric diagram

- Auditorium 300m²
- Foyer 300m²
- Lobby 200m²
- Parking 300m²
- Library 300m²
- Additional facilities 600m²
- Volunteers 300m²
- Exposition 300m²
- Study areas 300m²
- Labs 2500m²
Stainless steel profile 300°

Suspended column round profile 100mm for the support of the interior slab

Glazing facet fixed on the beam

Load bearing column (steel) profile 300mm surrounded by metal coated coating

Metal panels enclosed in the steel truss

Steel handrail welded at metal plate and fixed at the edge of beam

Anchoring of suspension system

Scale 1:20
Design fragment
Detail 1
Scale 1:5

1. stainless steel suspension cable
2. pair of flat steel straps screwed on roof deck
3. 10mm flat steel straps
4. triangular metal plate adjusted on the beam for suspension of supporting column
5. roof floor consisting of:
   - metal panels finish 20mm
   - bitumen membrane
   - insulation
   - vapour control layer
   - composite frame slab 55mm
6. double steel I profile fixed at the edge to the gravity support beam 300*150
7. steel angle brackets for connection of beams
8. rectangular steel beams 500*200 for the support of the facade
9. metal panel 20mm enclosed in the outer frame of the facade
10. metal angle brackets for connection of beams and metal panels
11. supporting metal frame fixed on the beams and supporting the facade glazing and metal panels
12. aluminium mullion
13. steel beam profile 200*170
14. insulated glasses

Design fragment
Detail 2
Scale 1:5

1. intermediate floor consisting of
   - timber floor boards
   - 60mm heating screed
   - separating membrane
   - 15mm thermal insulation
   - 15mm sound insulation
   - 150mm composite steel frame slab
   - 20mm floor to floor insulation
2. steel angle bracket fixed on the gravity support beam
3. steel profile 200*170
4. metal frame 40*70 fixed on the beam and supporting the facade glazing and metal panels
5. metal insulated panel
6. suspended round column 100mm fixed on the beams
**Design fragment**

**Detail 3**

**Scale 1:5**

1. I beam stainless steel profile 360x300
2. Metal plates increasing durability of the nodes
3. 10mm thick flange steel strap
4. Pair of flat steel straps screwed to the beam
5. Stainless steel suspension cable

**Design fragment**

**Detail 4**

**Scale 1:5**

1. Interior ground floor slab
2. Double steel U profile fixed at the edge to the gravity support beam 300x150
3. Flat steel strap fixed on the gravity support structural wall
4. Reinforced concrete wall 300mm thick carrying the loads of the facade
5. Precast double T concrete slab elements positioned every 2500 in width
6. Re-enforced concrete elevation for the support of the T concrete elements
7. Unreinforced concrete slab 0.10m thick
8. Concrete deck finish
9. Steel angle brackets connecting steel truss and structure wall
10. Integrated into the slab gutter