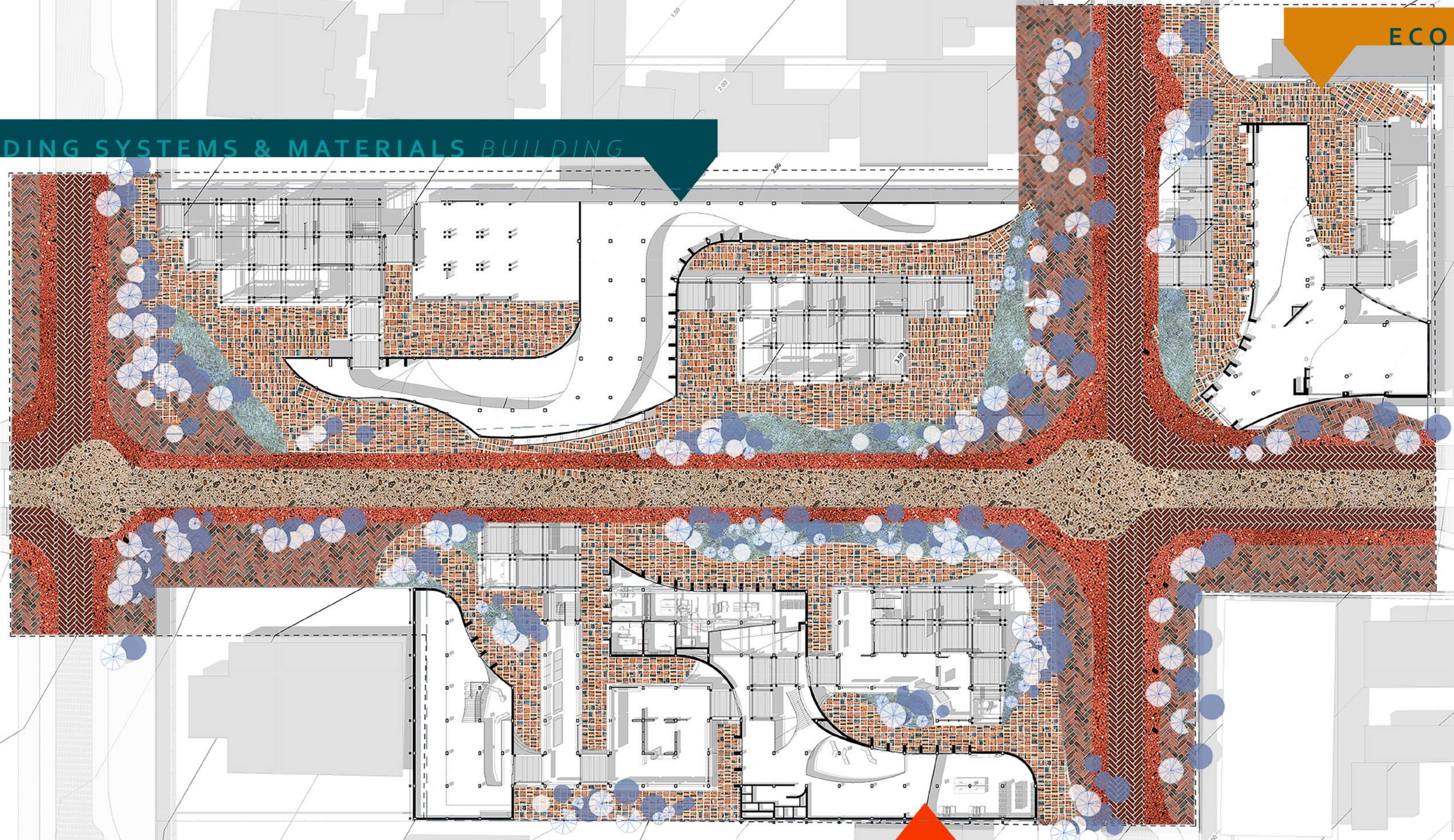


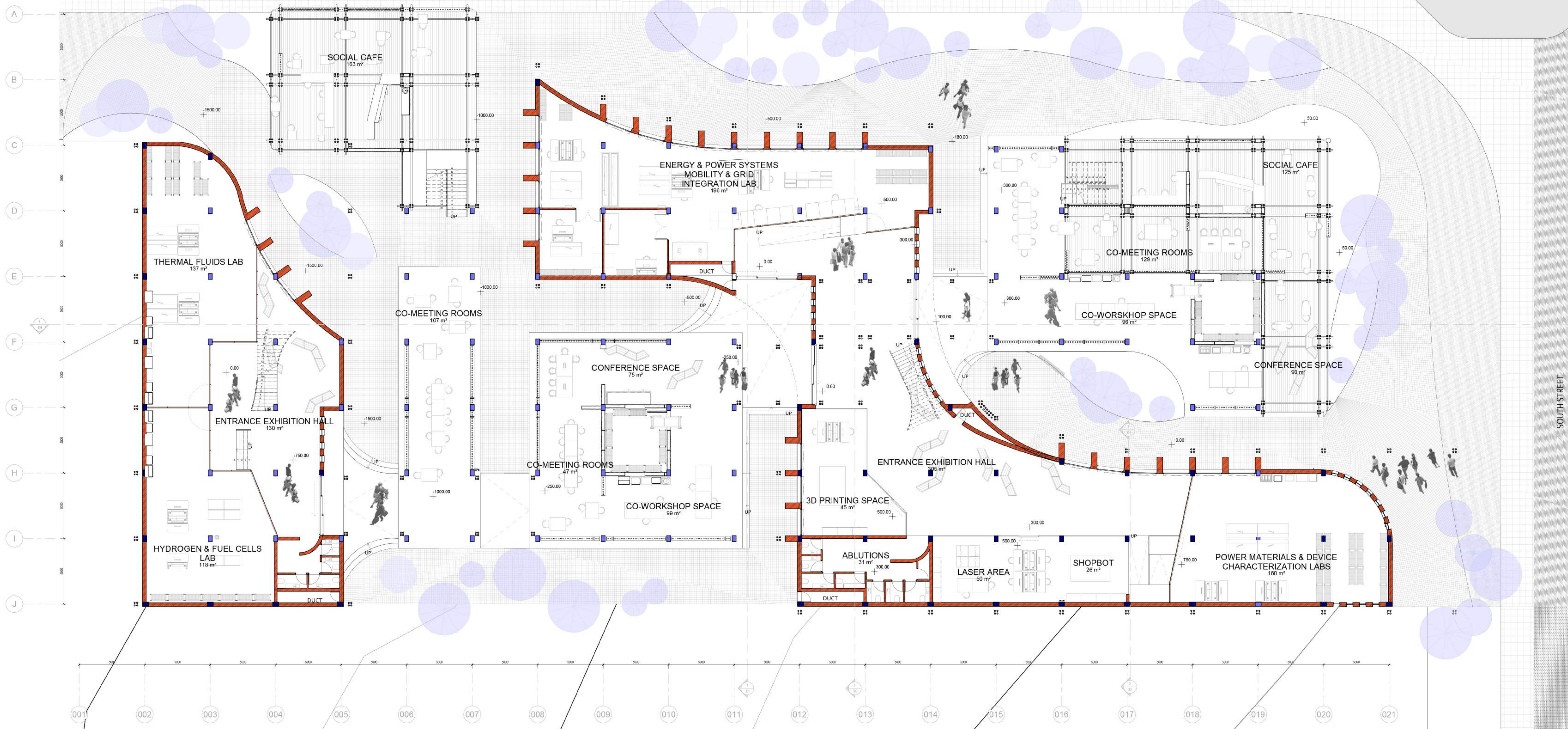
BUILDING SYSTEMS & MATERIALS BUILDING

ECOLOGICAL BUILDING

RENEWABLE ENERGY BUILDING



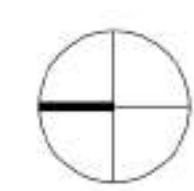
JAN SHOBA STREET

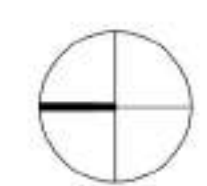
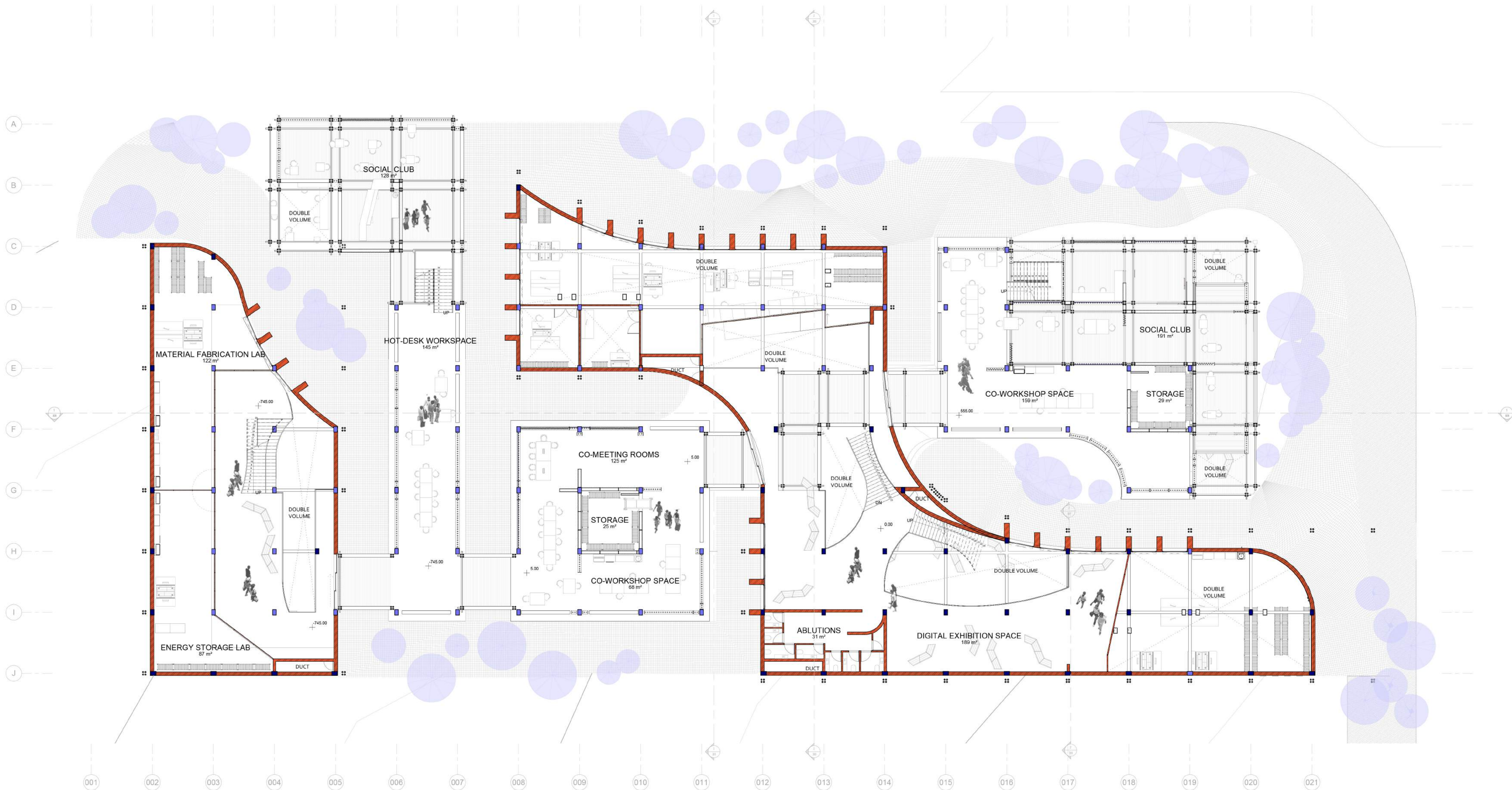


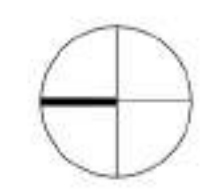
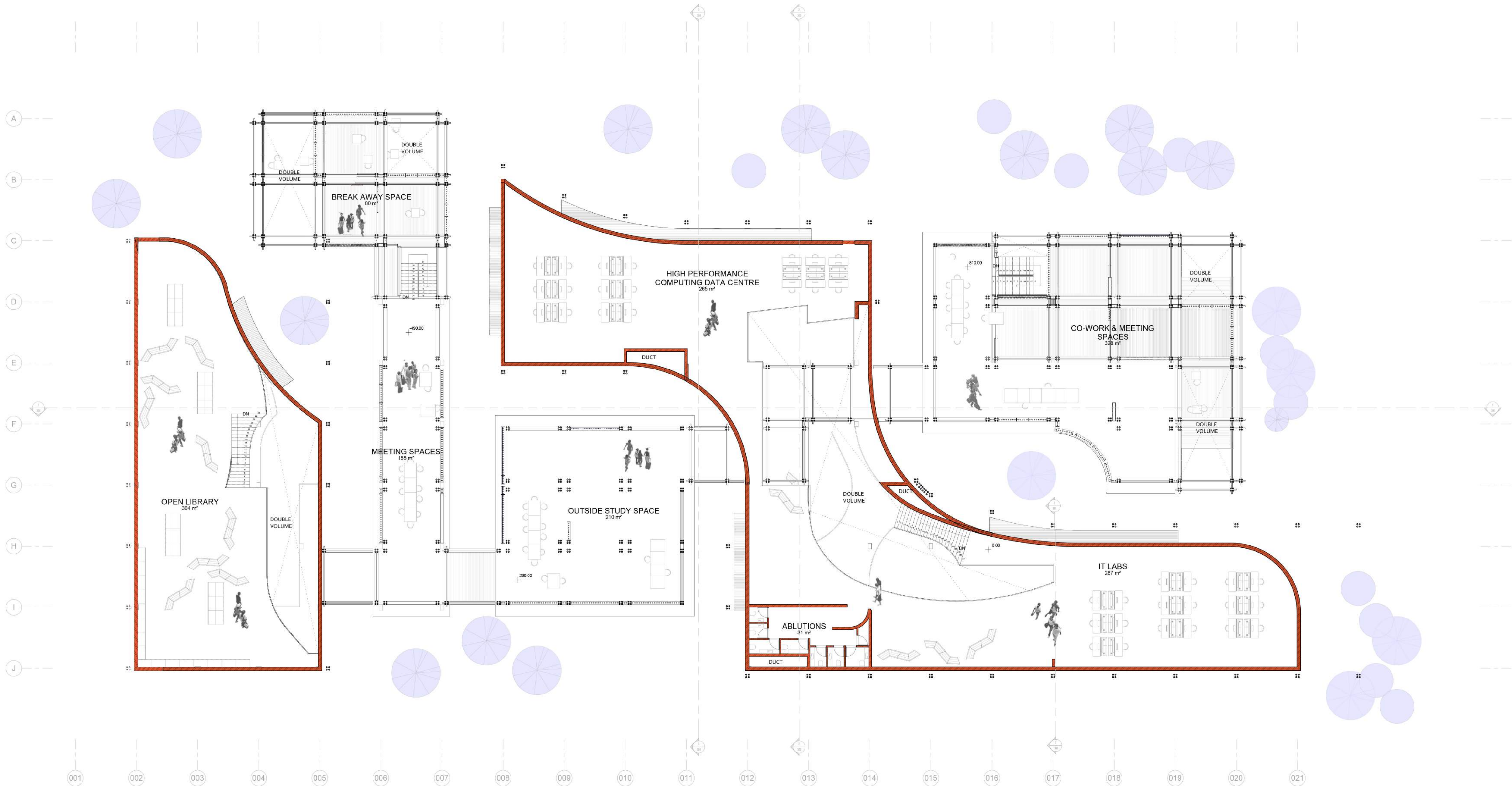
SOUTH STREET

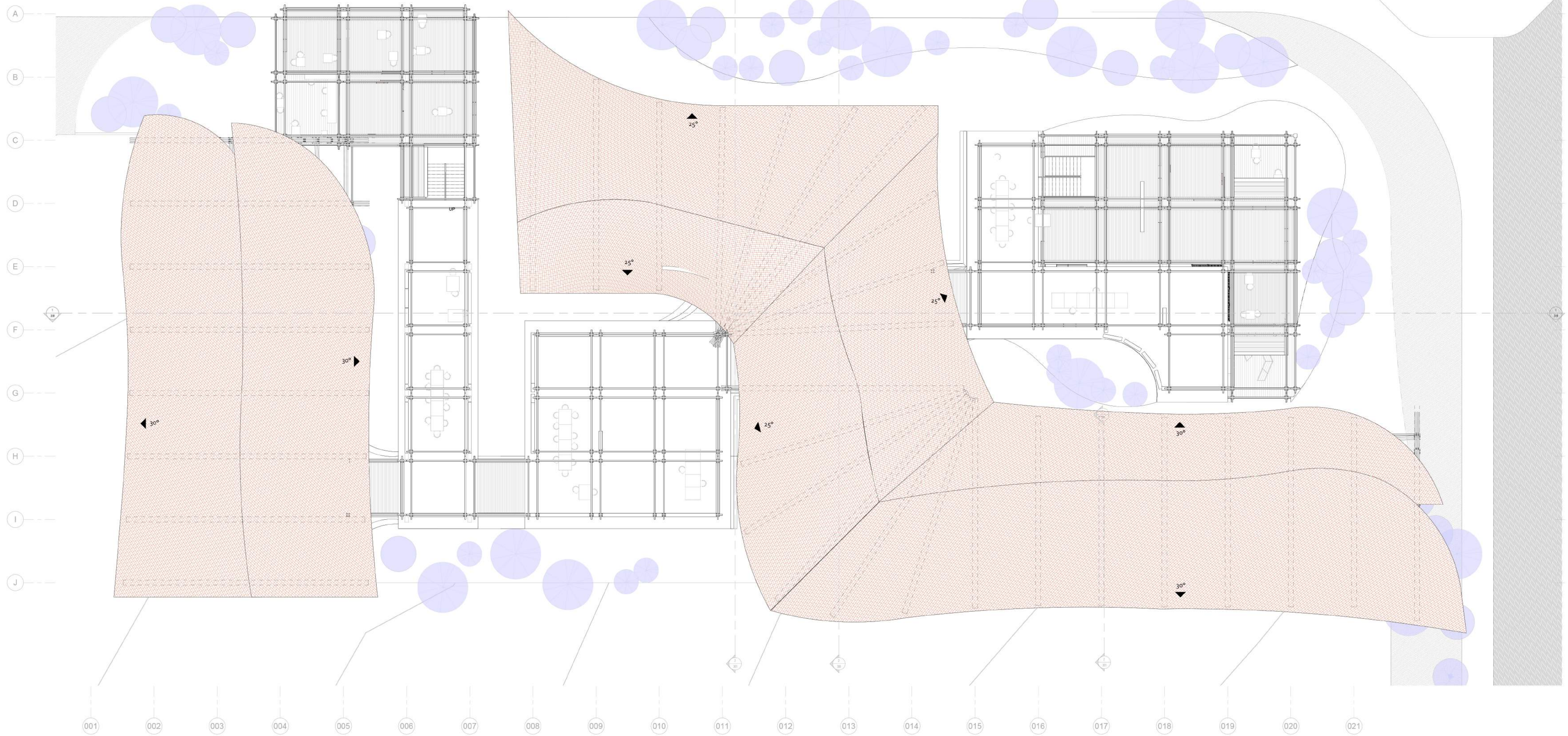
102-FF E BUILDING

1:100

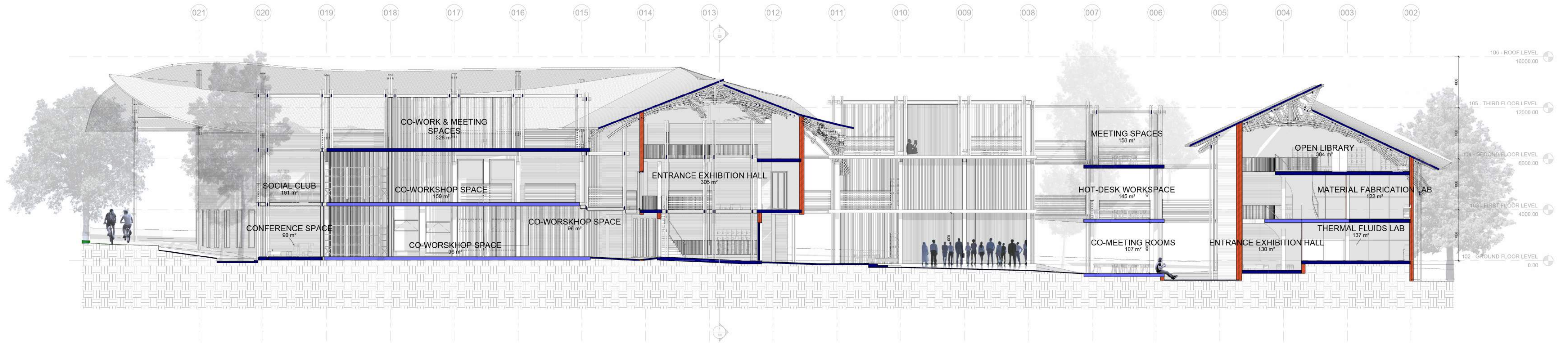




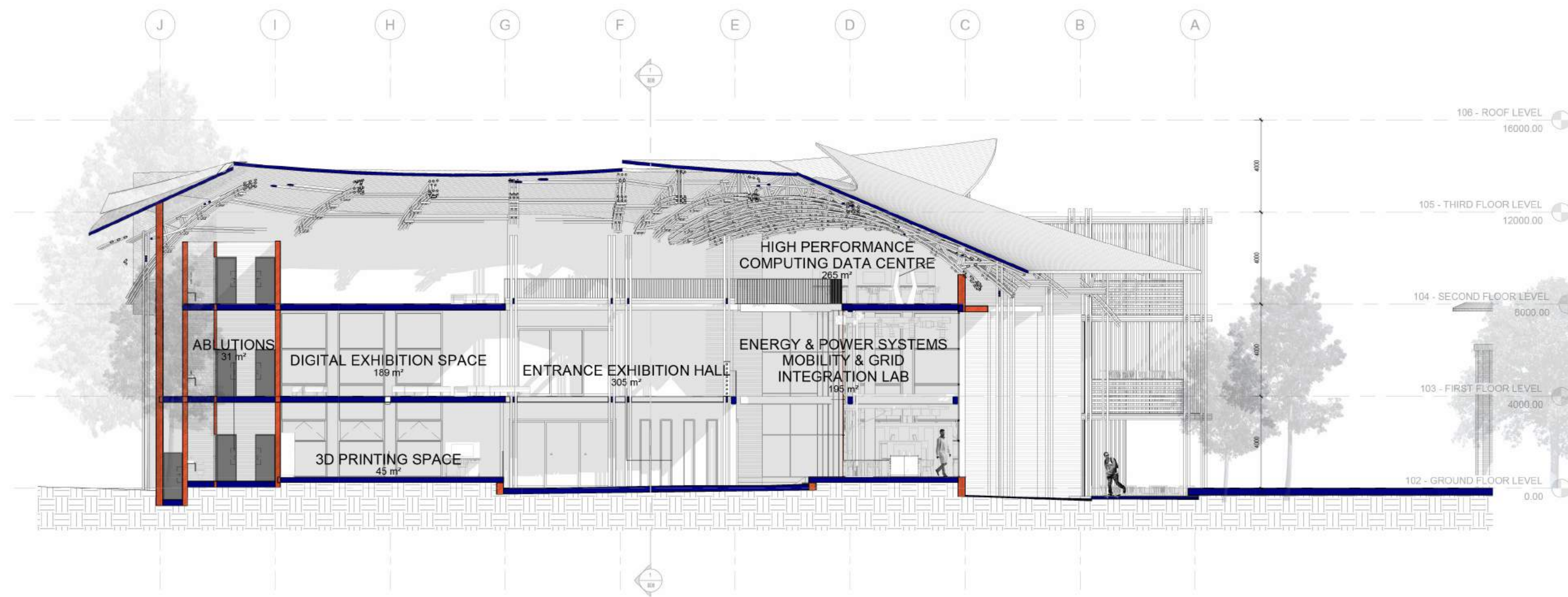




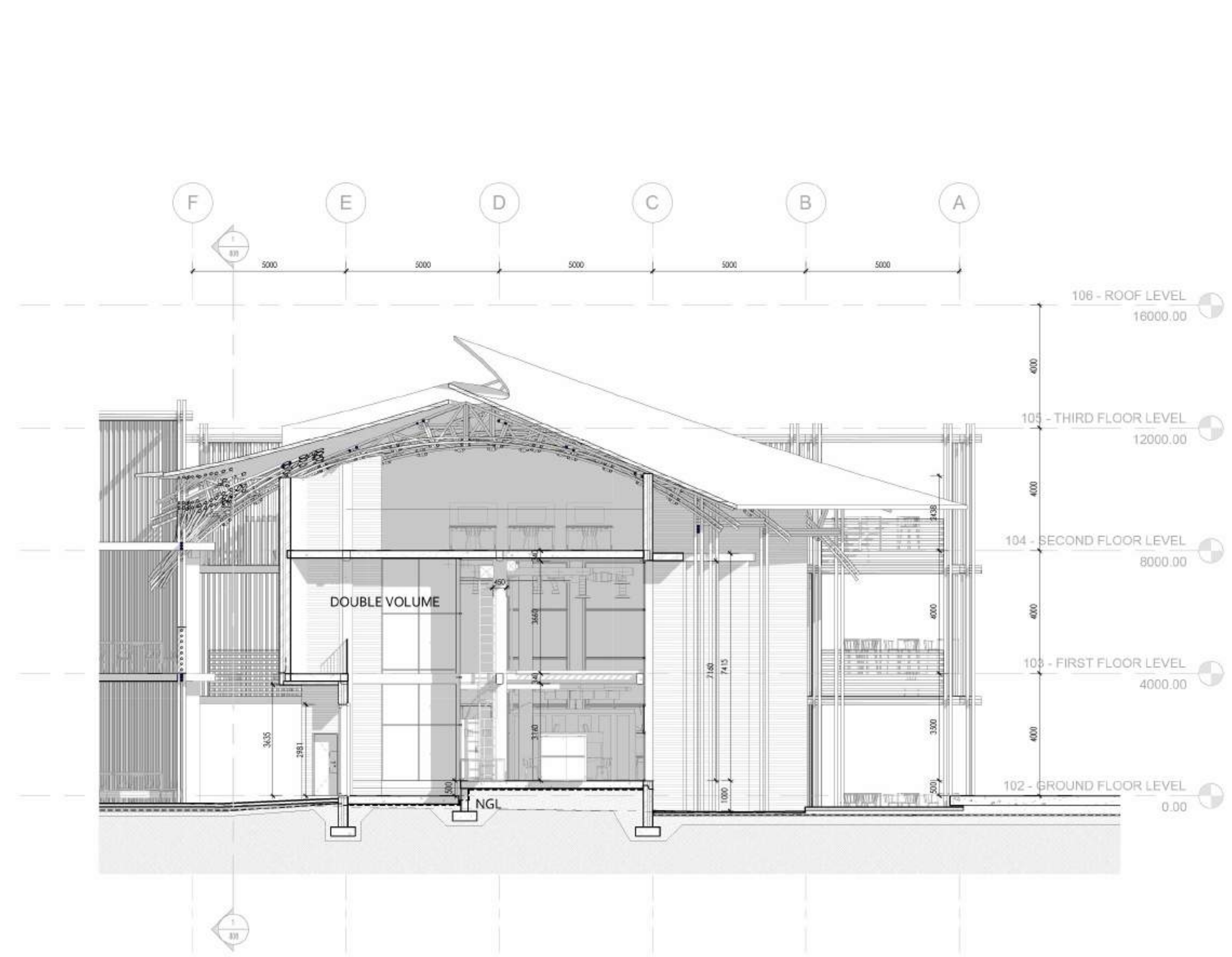
107-ROOF PLAN
1:100



SECTION AA
1:100

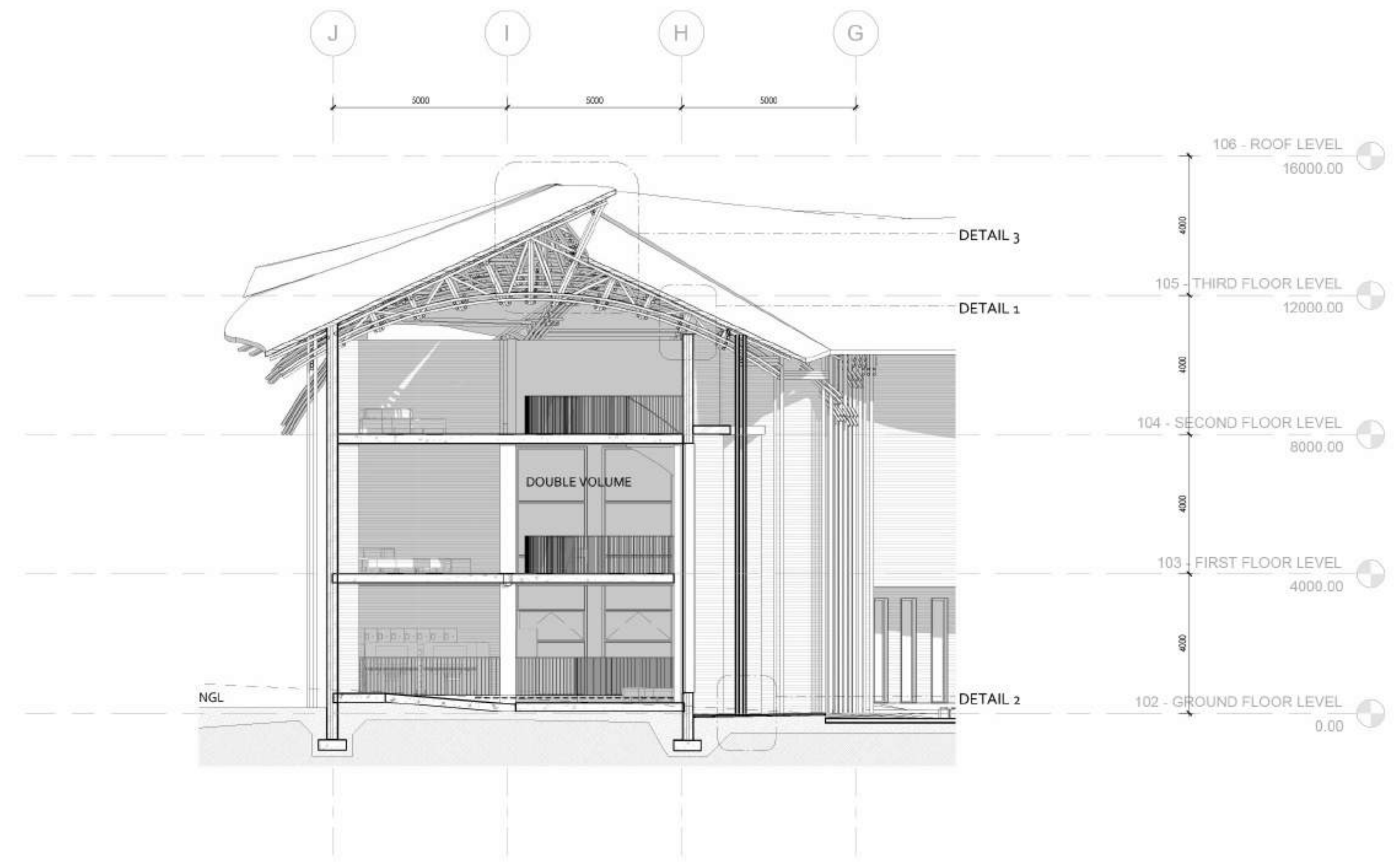


SECTION BB
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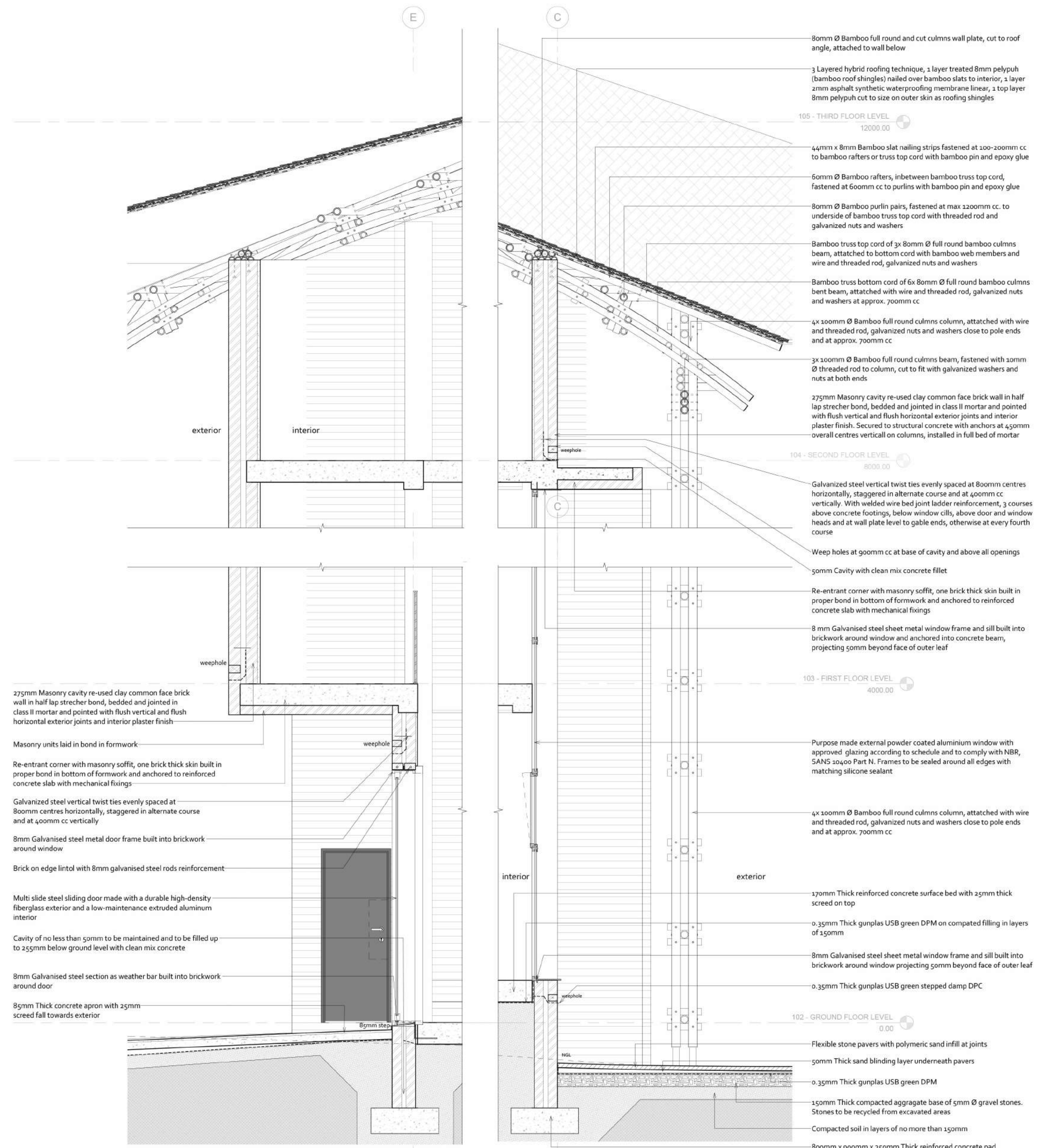
KEY PART CROSS SECTION CC

1 : 100



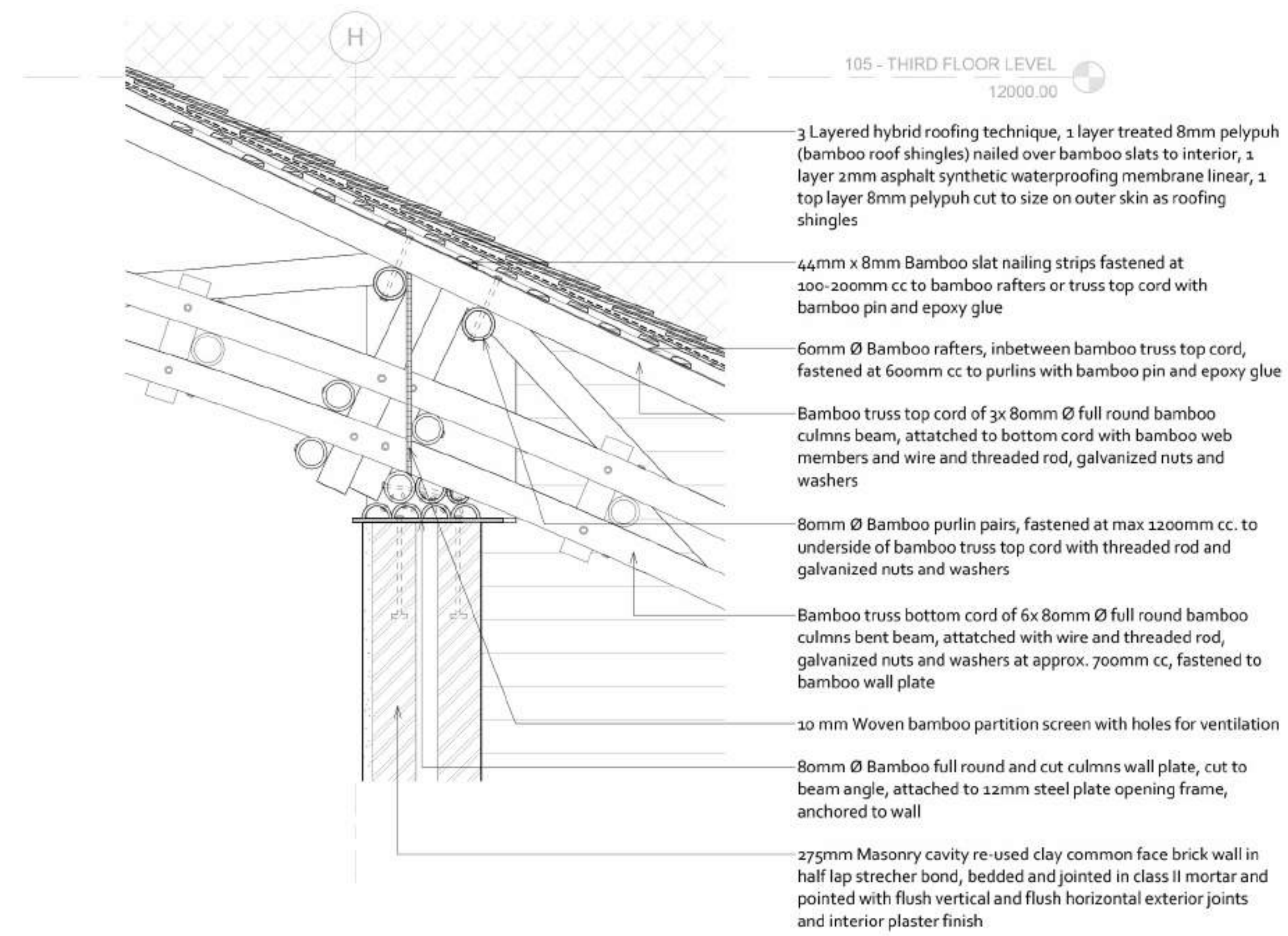
KEY TECHNICAL SECTION DD

1 : 100



PART CROSS SECTION CC - DETAILED

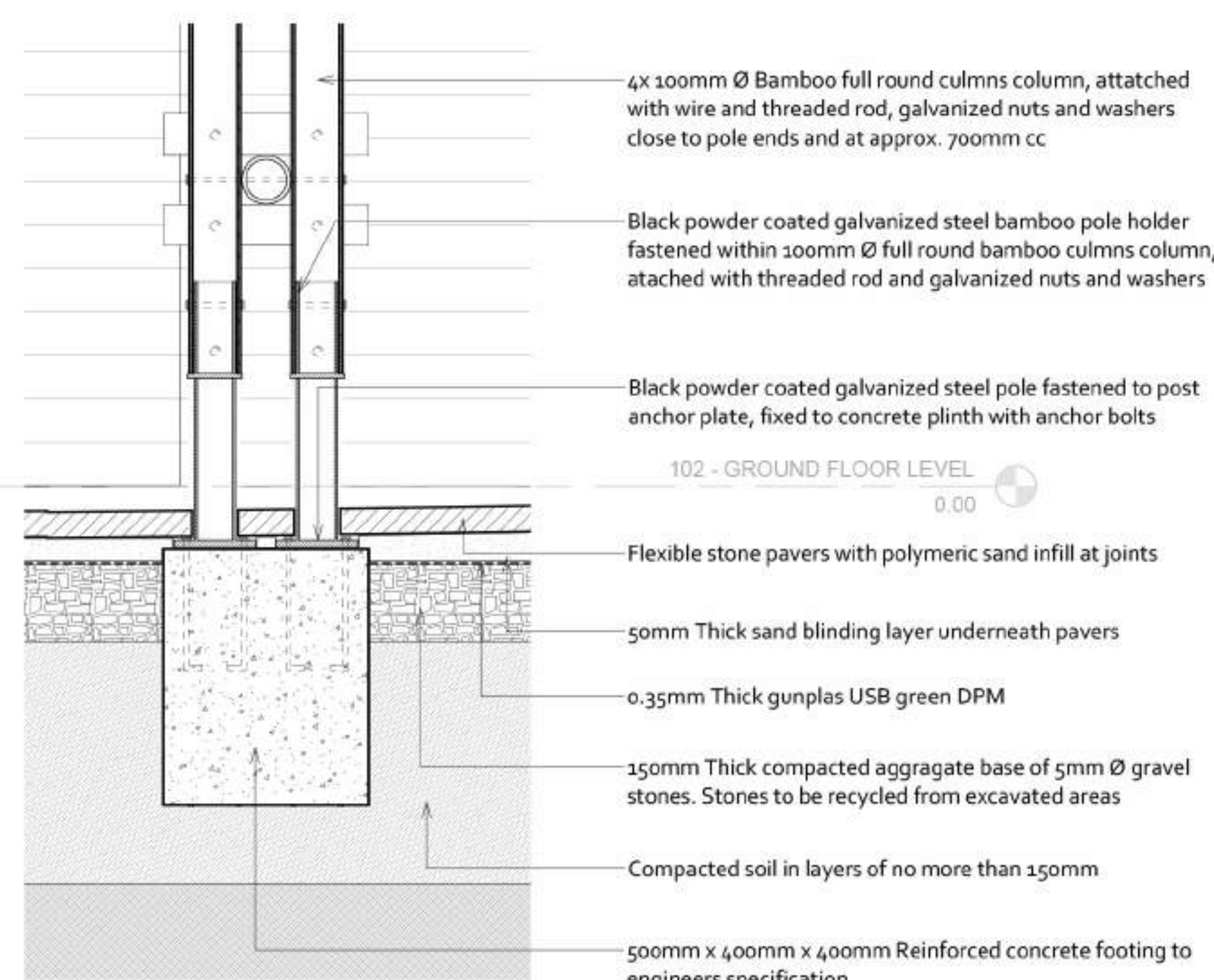
1 : 20



- 105 - THIRD FLOOR LEVEL
12000.00
- 3 Layered hybrid roofing technique, 1 layer treated 8mm pelypuh (bamboo roof shingles) nailed over bamboo slats to interior, 1 layer 2mm asphalt synthetic waterproofing membrane linear, 1 top layer 8mm pelypuh cut to size on outer skin as roofing shingles
- 44mm x 8mm Bamboo slat nailing strips fastened at 100-200mm cc to bamboo rafters or truss top cord with bamboo pin and epoxy glue
- 60mm Ø Bamboo rafters, inbetween bamboo truss top cord, fastened at 600mm cc to purlins with bamboo pin and epoxy glue
- Bamboo truss top cord of 3x 80mm Ø full round bamboo culms beam, attached to bottom cord with bamboo web members and wire and threaded rod, galvanized nuts and washers
- 80mm Ø Bamboo purlin pairs, fastened at max 1200mm cc. to underside of bamboo truss top cord with threaded rod and galvanized nuts and washers
- Bamboo truss bottom cord of 6x 80mm Ø full round bamboo culms bent beam, attached with wire and threaded rod, galvanized nuts and washers at approx. 700mm cc, fastened to bamboo wall plate
- 20 mm Woven bamboo partition screen with holes for ventilation
- 80mm Ø Bamboo full round and cut culms wall plate, cut to beam angle, attached to 12mm steel plate opening frame, anchored to wall
- 275mm Masonry cavity re-used clay common face brick wall in half lap stretcher bond, bedded and jointed in class II mortar and pointed with flush vertical and flush horizontal exterior joints and interior plaster finish

TECHNICAL SECTION DD - DETAIL 1

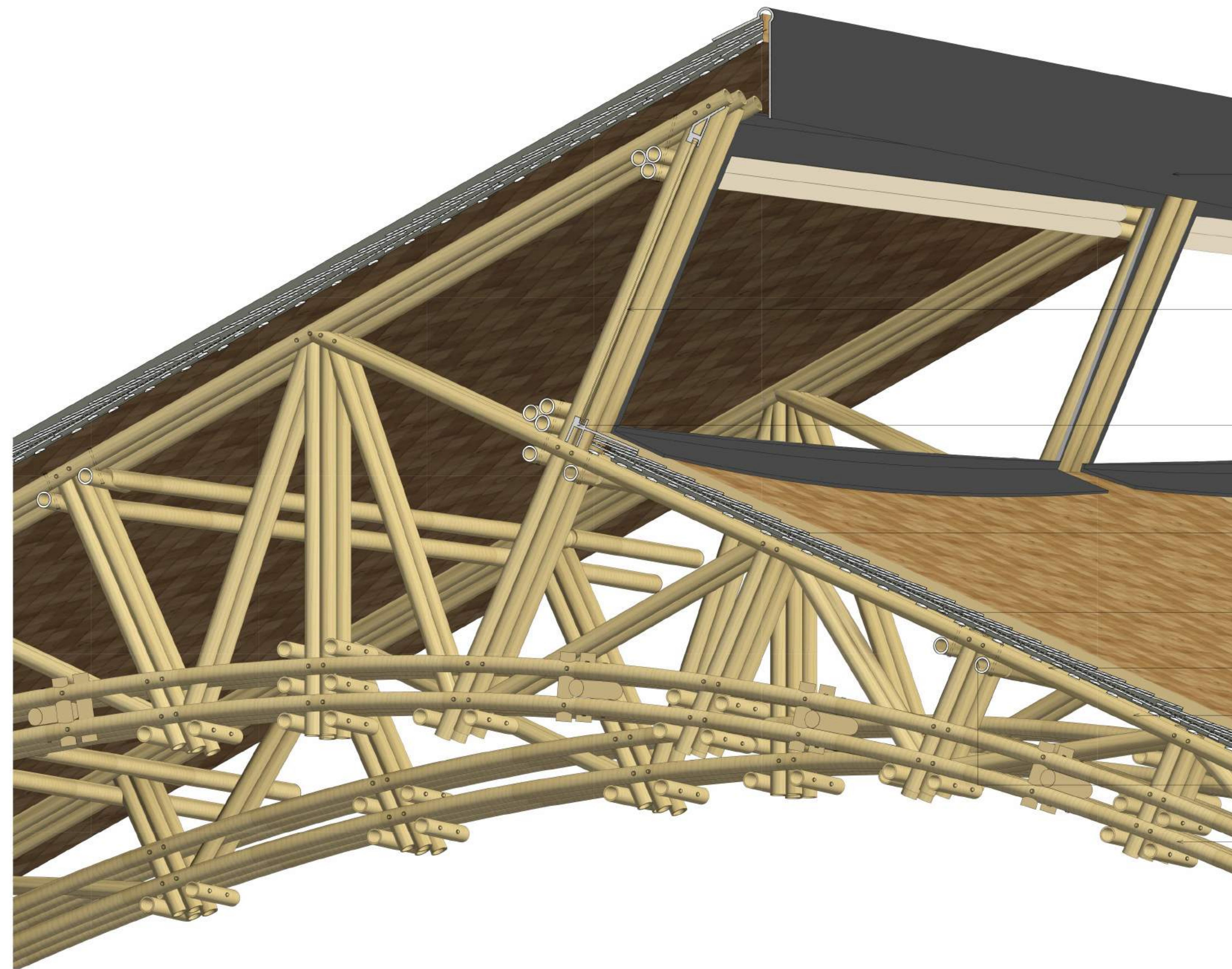
1:10



- 102 - GROUND FLOOR LEVEL
0.00
- 4x 100mm Ø Bamboo full round culms column, attached with wire and threaded rod, galvanized nuts and washers close to pole ends and at approx. 700mm cc
- Black powder coated galvanized steel bamboo pole holder fastened within 200mm Ø full round bamboo culms column, attached with threaded rod and galvanized nuts and washers
- Black powder coated galvanized steel pole fastened to post anchor plate, fixed to concrete plinth with anchor bolts
- Flexible stone pavers with polymeric sand infill at joints
- 50mm Thick sand blinding layer underneath pavers
- 0.35mm Thick gunplas USB green DPM
- 150mm Thick compacted aggregate base of 5mm Ø gravel stones. Stones to be recycled from excavated areas
- Compacted soil in layers of no more than 150mm
- 500mm x 400mm x 400mm Reinforced concrete footing to engineers specification

TECHNICAL SECTION DD - DETAIL 2

1:10



- 8mm Galvanized steel sheet metal flashing acc. to specialist detail and spec
- Purpose made external powder coated aluminium window with approved glazing according to schedule and to comply with NBR, SANS 20400 Part N. Frames to be sealed around all edges with matching silicone sealant
- 8mm Galvanized steel sheet metal window frame and sill attached to bamboo cross bracing members around window
- 3 Layered hybrid roofing technique, 1 layer treated 8mm pelypuh (bamboo roof shingles) nailed over bamboo slats to interior, 1 layer 2mm asphalt synthetic waterproofing membrane linear, 1 top layer 8mm pelypuh cut to size on outer skin as roofing shingles
- 44mm x 8mm Bamboo slat nailing strips fastened at 100-200mm cc to bamboo rafters or truss top cord with bamboo pin and epoxy glue
- 60mm Ø Bamboo rafters, inbetween bamboo truss top cord, fastened at 600mm cc to purlins with bamboo pin and epoxy glue
- Bamboo truss top cord of 3x 80mm Ø full round bamboo culms beam, attached to bottom cord with bamboo web members and wire and threaded rod, galvanized nuts and washers
- 80mm Ø Bamboo purlin pairs, fastened at max 1200mm cc. to underside of bamboo truss top cord with threaded rod and galvanized nuts and washers
- Bamboo truss bottom cord of 6x 80mm Ø full round bamboo culms bent beam, attached with wire and threaded rod, galvanized nuts and washers at approx. 700mm cc, fastened to bamboo wall plate

TECHNICAL SECTION DD - DETAIL 3

1:10



EASTERN ELEVATION
1:100



SOUTHERN ELEVATION
1:100

