



CHAPTER 9: DESIGN AND TECHNICAL DRAWINGS

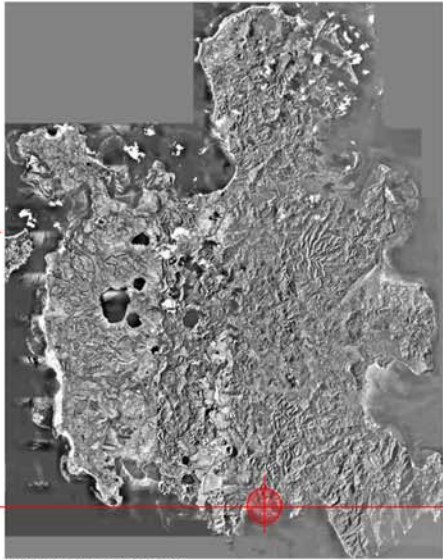
1. LOCATION PLANS



AFRICA VS. MADAGASCAR



MADAGASCAR VS. NOSY BE

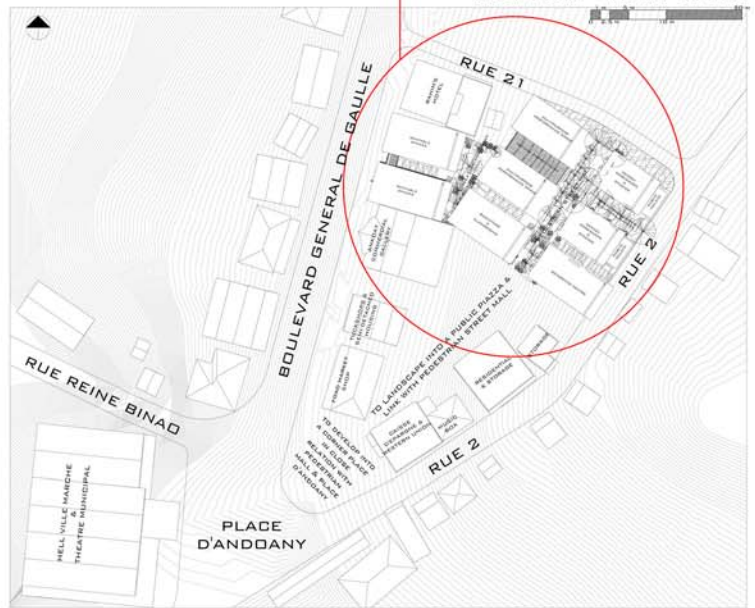


NOSY BE VS. HELLVILLE



HELLVILLE VS. SITE

ROOF PLAN - 1:500 - 2/1/A0



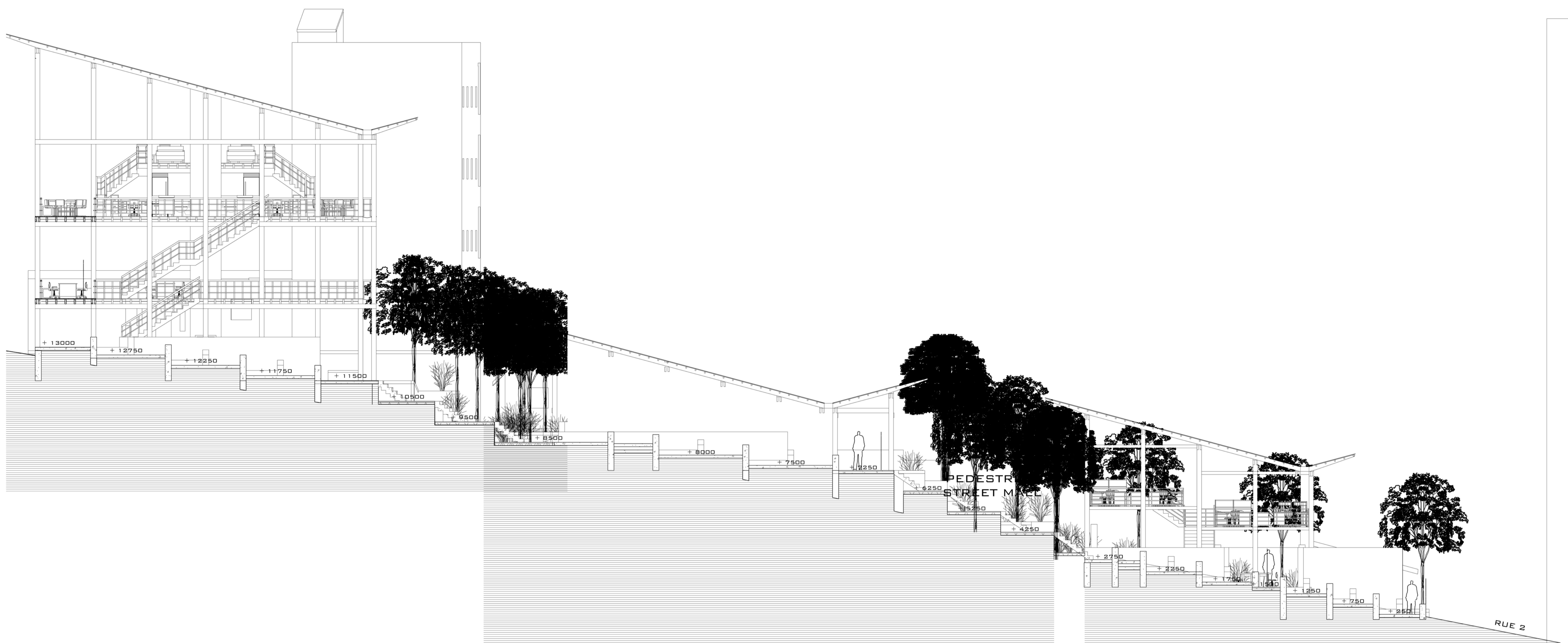
ENSEMBLE - AERIAL VIEW - 1/1/A0



SITE PLAN - 1:200 - 3/1/A0

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2. CONTEXTUAL SECTIONS



CROSS SECTION THROUGH BOULEVARD GENERAL DE GAULLE + MAIN CIRCULATION SPACE + PEDESTRIAN STREET MALL + RUE 2
1:100 - 1/2/A0



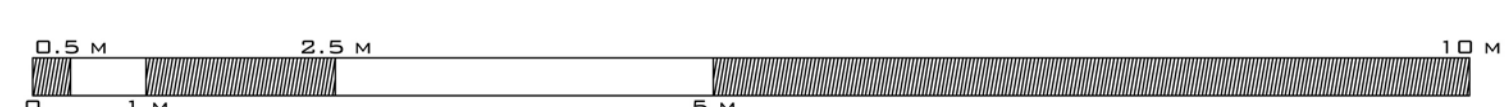
CROSS SECTION THROUGH OUTSIDE AMPITHEATRE & SCULPTURAL GARDEN
1:100 - 2/2/A0



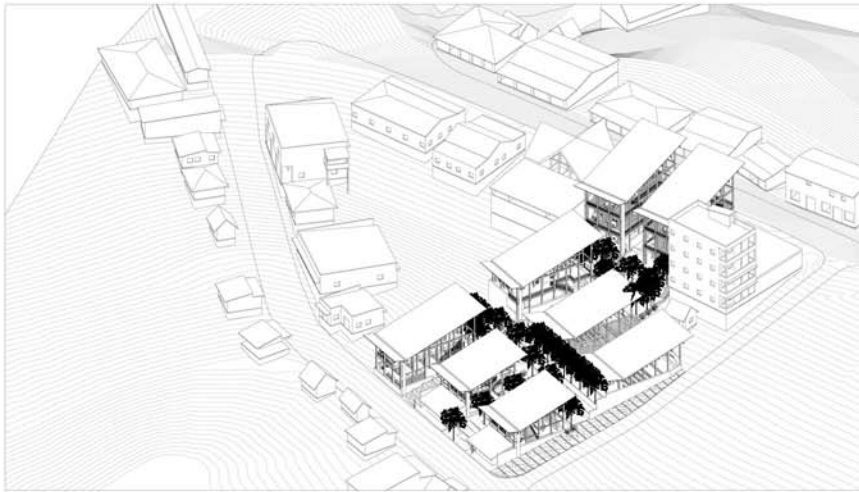
SECTION THROUGH THE PEDESTRIAN STREET MALL - 3/2/A0



PERSPECTIVE VIEW FROM RUE 21 - 4/2/A0



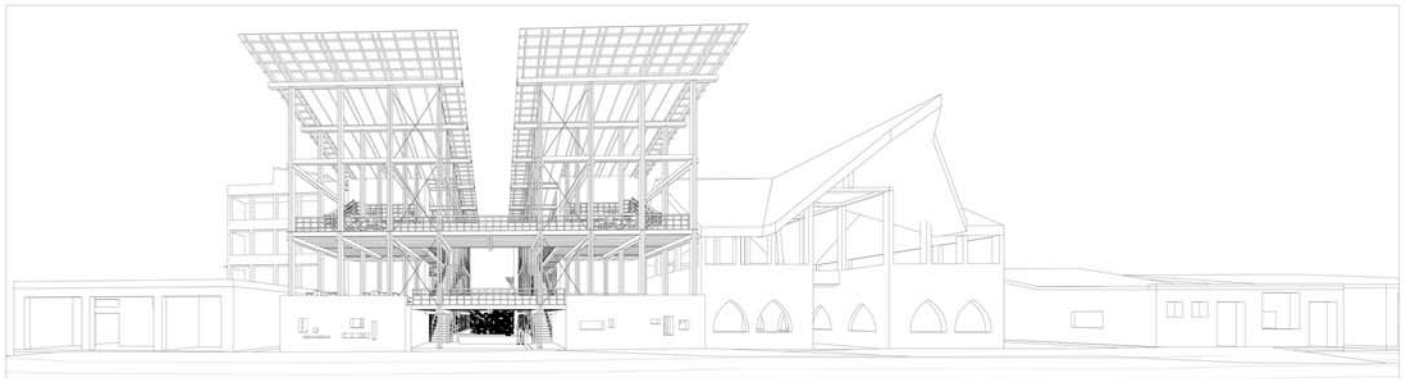
3. CONTEXTUAL PERSPECTIVES



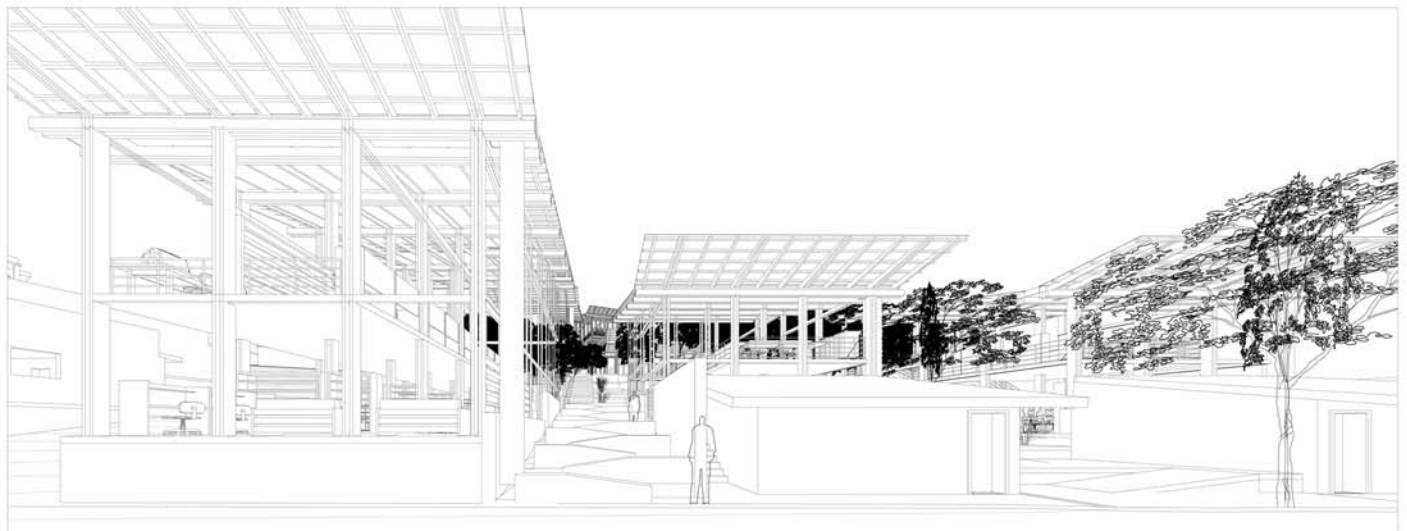
AERIAL VIEW - 1/3/AD



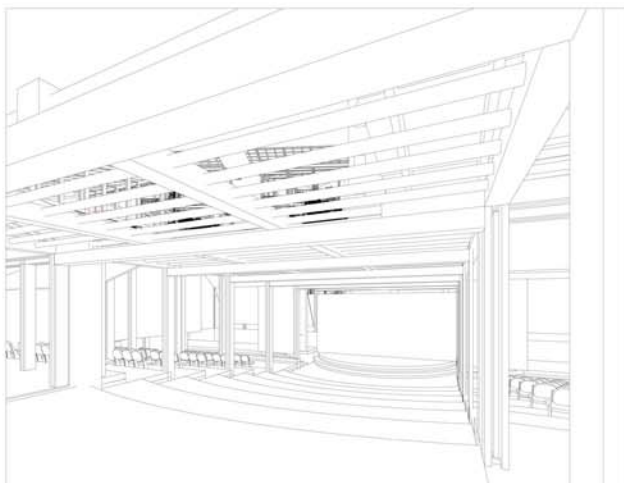
PERSPECTIVE VIEW FROM PROPOSED LANDSCAPED PIAZZA - 2/3/AD



PERSPECTIVE VIEW FROM THE BOULEVARD GENERAL DE GAULLE - 3/3/AD



PERSPECTIVE VIEW FROM RUE 2 - 4/3/AD



PERSPECTIVE VIEW OF THE OUTSIDE AMPHITHEATRE - 5/3/AD



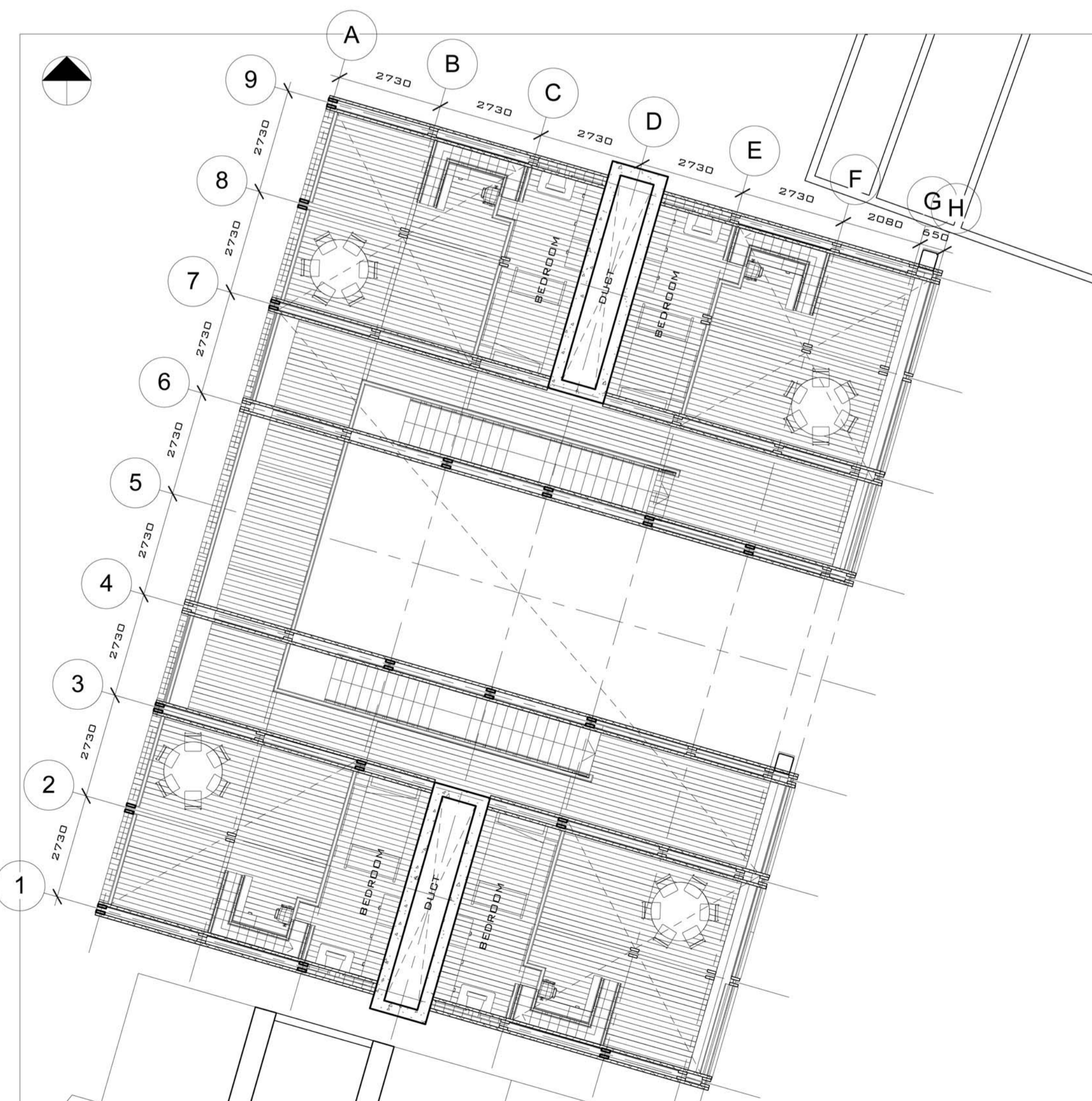
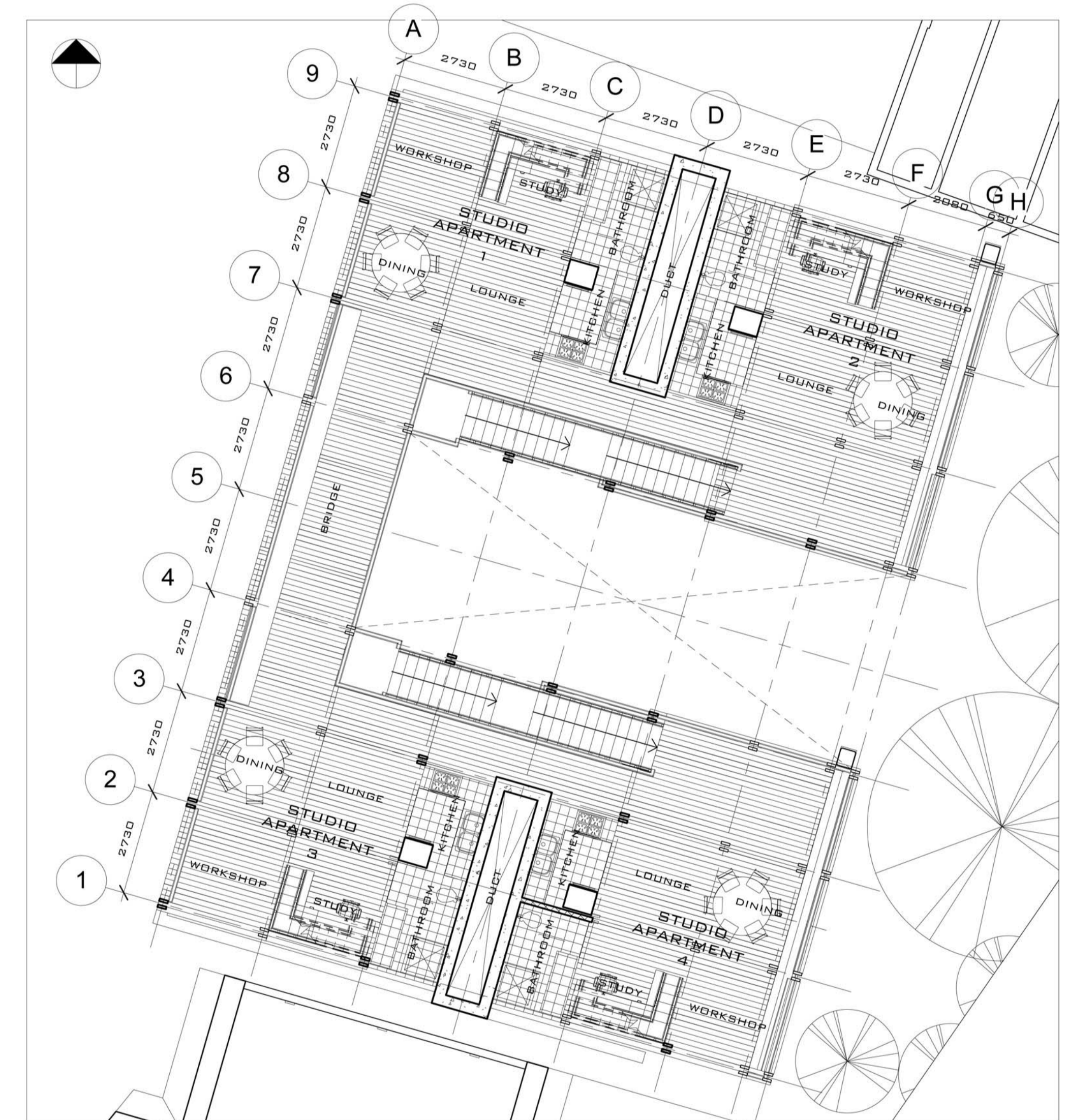
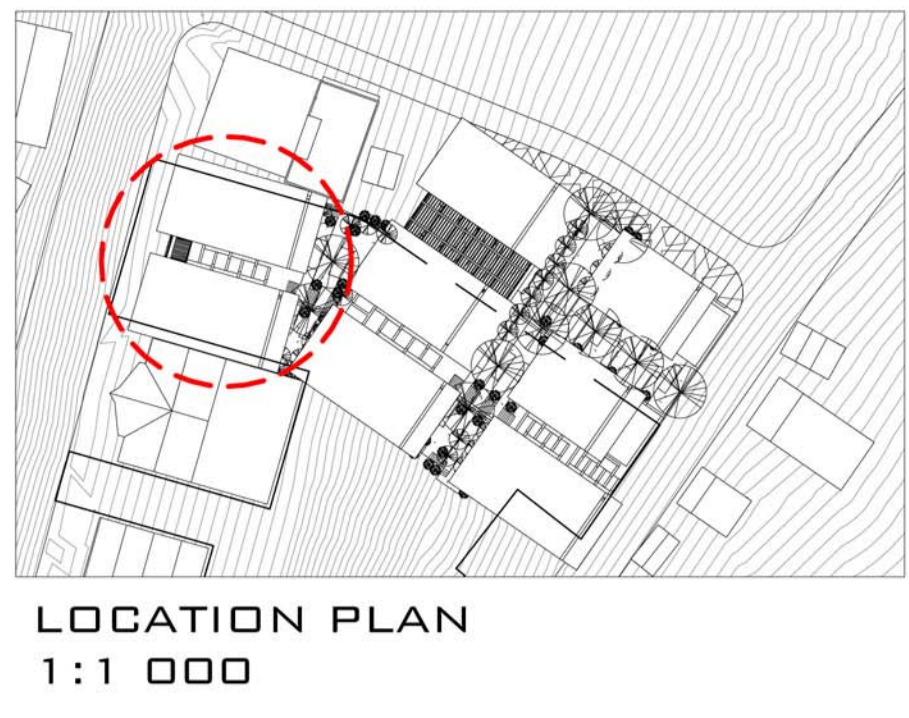
PERSPECTIVE VIEW OF THE SCULPTURAL GARDEN - 6/3/AD

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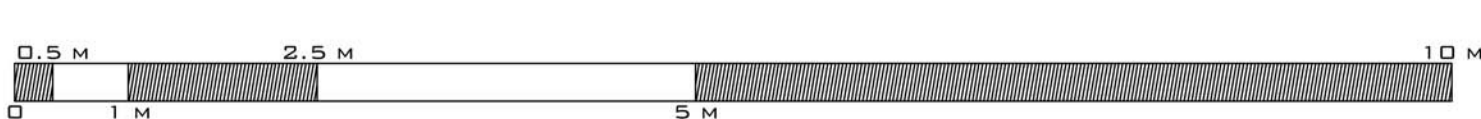
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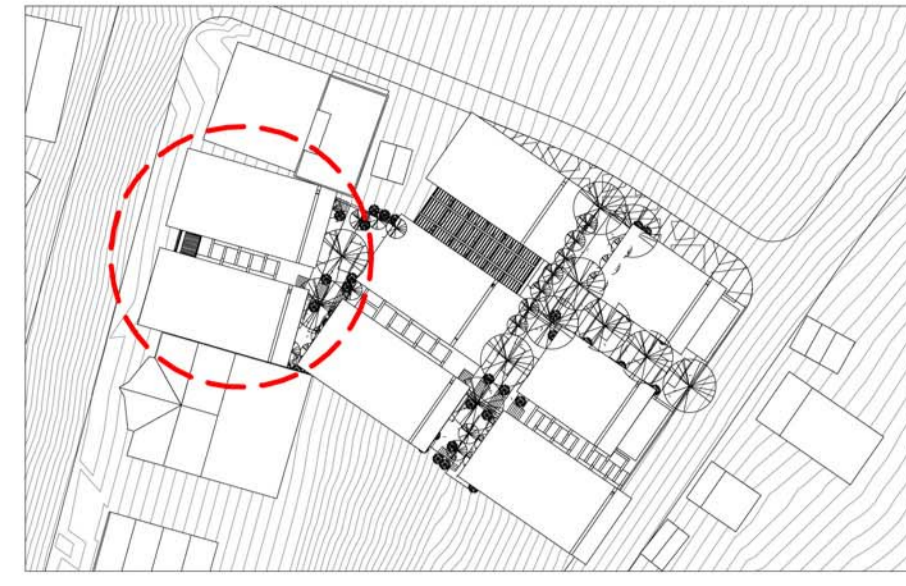
4. RENTABLE SPACES - 1.100 FLOOR PLANS



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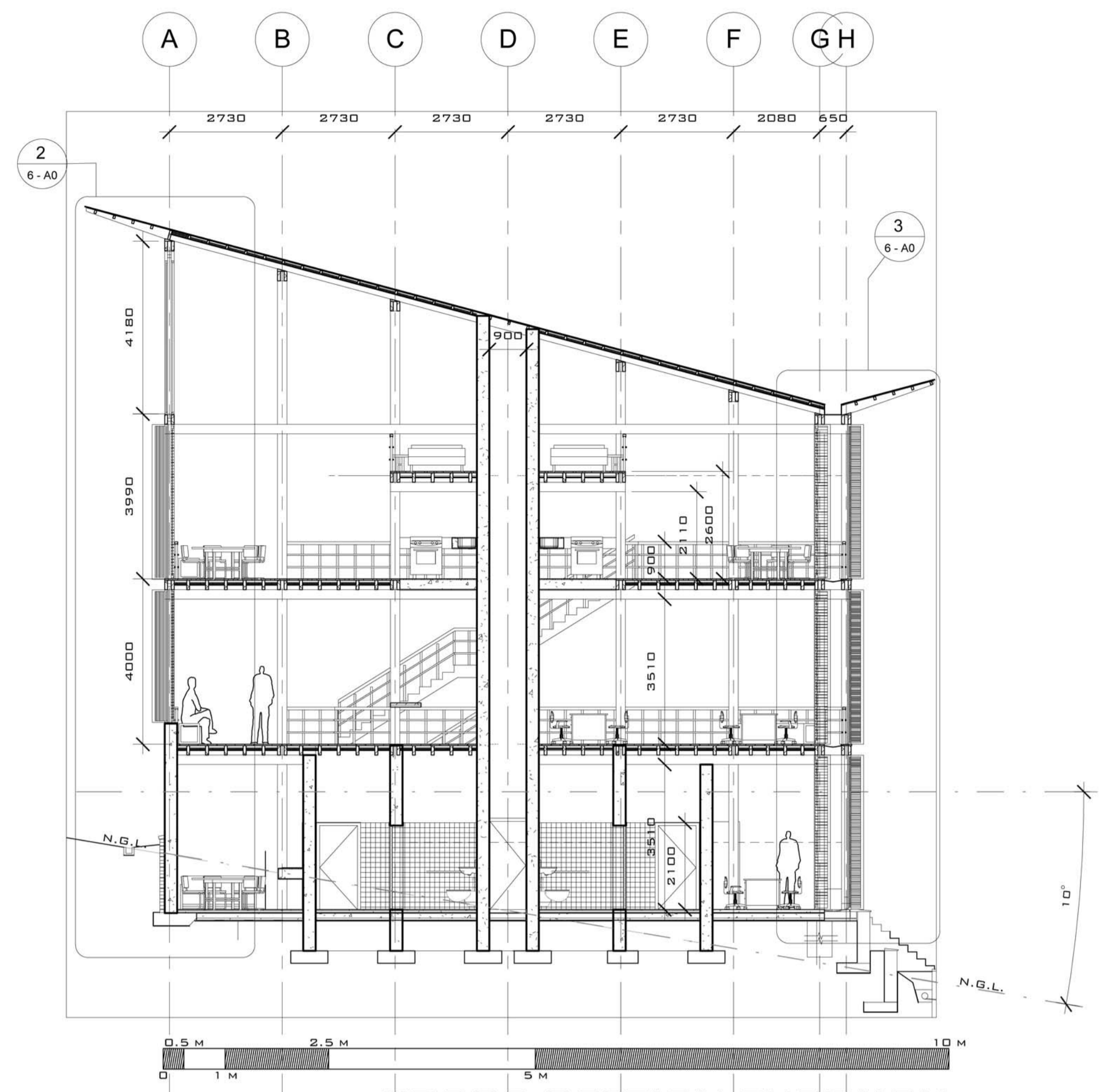
6. RENTABLE SPACES - 1.100 CROSS & 1.20 WALL SECTIONS



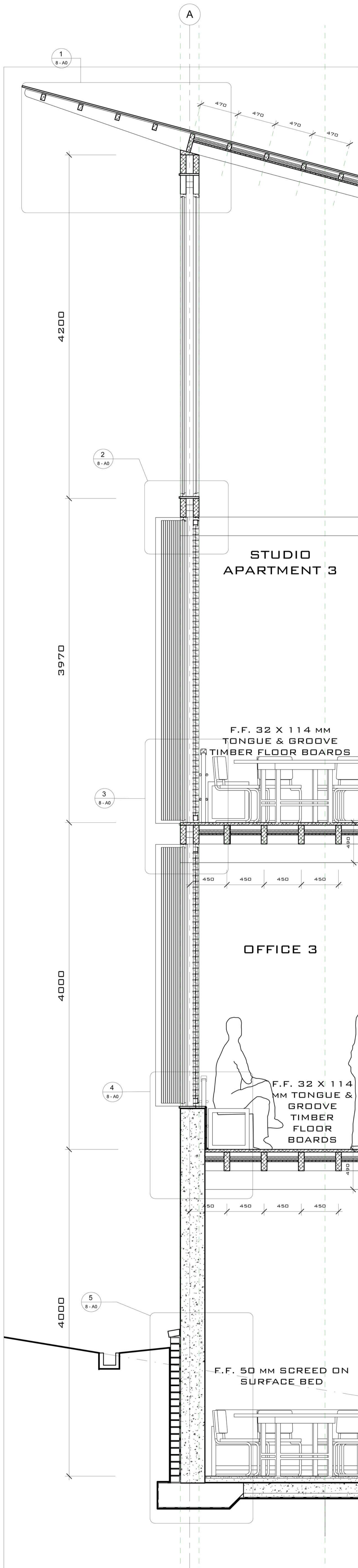
BUILDING LOCATION PLAN
1:1 000



LOCATION PLAN FOR THE SECTIONS
1:200



CROSS SECTION THROUGH EMPLOYMENT AGENCY + SHOPS & OFFICES + STUDIO APARTMENTS
1:100 - 1/6/AD



WALL SECTION 1 1:20 - 2/6/AD

ROOF
SHEETING: COR-TEN AZP (TM) PREPAINTED GALVALUME STEEL CORRUGATION, SPANNING AT 941 MM, FIXED ONTO PURLINS
ROOF INSULATION: MINERAL FIBRE BLANKET FITTED IN BETWEEN 50 X 150 MM BATTENS/PURLINS (CEILING BRANDING)
STRUCTURE 1: TIMBER RAFTERS CONSISTING OF A DOUBLE BEAM SYSTEM OF 70 X 228 MM ELEMENTS, SPANNING AT 2820 MM, SPACED AT 2728 MM CENTRES
SUBSTRUCTURE 1 - PARALLEL WITH MAIN RAFTERS: 70 X 228 MM ELEMENTS, SPANNING AT 2824 MM, SPACED AT 910 MM CENTRES
STRUCTURE 2: TIMBER PURLINS CONSISTING OF A DOUBLE BEAM SYSTEM OF 70 X 228 MM ELEMENTS PERPENDICULAR TO THE RAFTER, SPANNING AT 2500 MM, SPACED AT 2830 MM CENTRES
SUBSTRUCTURE 2 - PARALLEL WITH MAIN PURLINS: 50 X 150 MM ELEMENTS, SPANNING AT 960 MM, SPACED AT 940 MM CENTRES
CEILING BOARDS: 16 X 114 MM TONGUE AND GROOVE TIMBER BOARDS, SPANNING AT 315 MM, NAILED ONTO BRANDING WITH STAGGERED END JOINTS AT RIGHT ANGLES WITH RAFTERS
ROOF DRAINAGE: 417 X 239 X 10 MM COR-TEN AZP (TM) BOX GUTTER FIXED ONTO PURLINS, TO JOIN COR-TEN AZP (TM) 417 X 417 X 10 MM SQUARE DOWNPIPE

TIMBER POST-AND-LINTEL STRUCTURAL TYPOLOGY
STRUCTURAL TIMBER: NANTO (LOCAL NAME) - FAUCHERA SPP., DENSE AND HARD WOOD, WITH A MEAN DENSITY OF 12%, HUMIDITY LEVEL OF 1.03, AND MEAN HARDNESS OF 9, NO INDUSTRIAL TREATMENT REQUIRED, ONLY APPLICATION OF TWO LAYERS OF LASURE DURING CONSTRUCTION OR SEMI-TRANSPARENT BROWN IRON OXIDE PIGMENT PENETRATING STAIN
STRUCTURAL SIZES: DOUBLE-COLUMN AND DOUBLE-BEAM SYSTEMS, MADE OUT OF 70 X 228 MM ELEMENTS, SPANNING AT 2728 MM, SPACED AT 2728 MM CENTRES

OPENINGS
1. WEST FACADE:
TIMBER FRAMEWORK: MODULAR WIDTH OF 417 MM, CONSISTING OF 70 X 44 MM ELEMENTS OVERALL, MADE OUT OF MERBAU - CAESALPINIACEA, INTSIA BIJUGA, AFZELIA BIJUGA, INTSIA PALEMBANICA -
OUTSIDE PIVOTING OPENINGS: WITH 20 MM DIAMETER VERTICAL BAMBOO RODS FIXED ONTO FRAMES, SPACED AT 30 MM CENTRES
OUTSIDE FIXED LOUVRES: WITH 20 MM DIAMETER VERTICAL BAMBOO RODS FIXED ONTO FRAMES, SPACED AT 30 MM CENTRES
INSIDE FIXED SCREENS WITH OPERABLE GLASS LOUVRES: WITH 8 MM LAMINATED GLAZING FRAMED IN ALUMINIUM SUBFRAMES TO ALLOW THE GLASS LOUVRES TO ROTATE FROM 0 TO 85 DEGREES
INSIDE FIXED GLASS CURTAIN WALLS: WITH 8 MM LAMINATED GLAZING FIXED ONTO FRAMES, SEALED WITH SILICONE BEAD SEALANT
WEATHERPROOFING: 16 MM TIMBER PROFILE WITH A DRIP AS OPENING SILL

2. EAST FACADE:
TIMBER FRAMEWORK: SLIDING AND FOLDING SYSTEM, MODULAR WIDTH OF 417 MM, CONSISTING OF 70 X 44 MM TIMBER ELEMENTS OVERALL
OUTSIDE SLIDING AND FOLDING OPENINGS: WITH 20 MM DIAMETER HORIZONTAL BAMBOO RODS FIXED ONTO FRAMES, SPACED AT 30 MM CENTRES, WITH PIVOTING AND SLIDING SETS
INSIDE SLIDING AND FOLDING OPENINGS WITH OPERABLE GLASS LOUVRES: WITH 8 MM LAMINATED GLAZING FRAMED IN ALUMINIUM SUBFRAMES TO ALLOW THE GLASS LOUVRES TO ROTATE FROM 0 TO 85 DEGREES, WITH PIVOTING AND SLIDING SETS

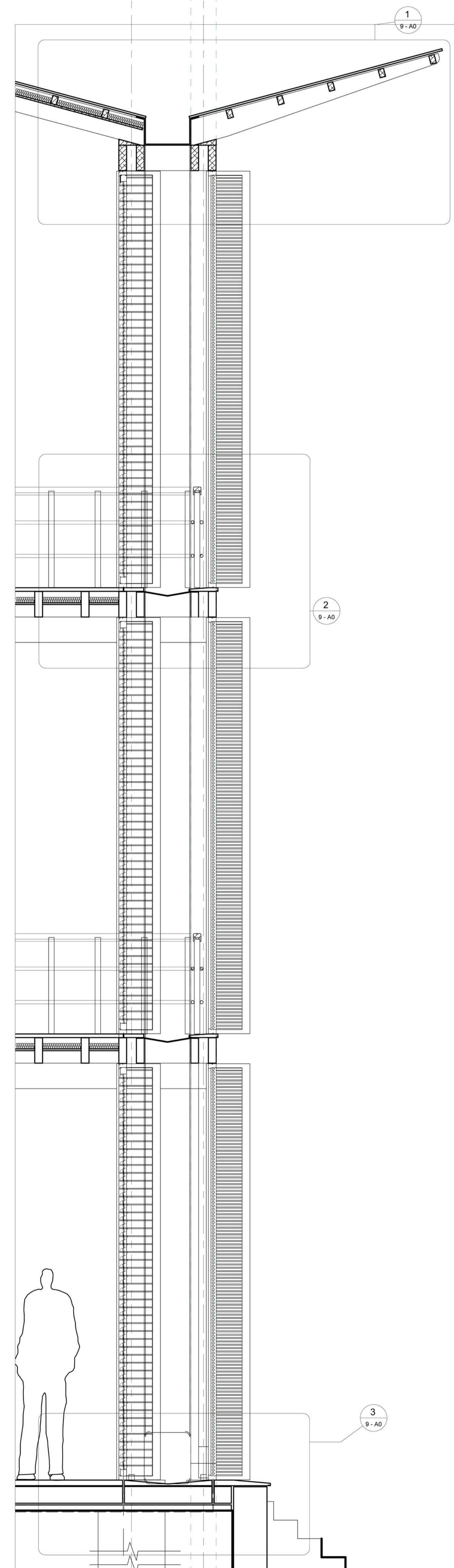
SUSPENDED TIMBER FLOOR
FLOOR FINISH: 32 X 114 MM TIMBER TONGUE AND GROOVE FLOOR BOARDS IN THE EAST-WEST DIRECTION
FLOOR JOISTS & CEILING BRANDERINGS: 70 X 228 MM HARDWOOD, SPANNING AT 2500 MM, SPACED AT 450 MM CENTRES, TO BE CLADDED BY TIMBER FLOOR BOARDS ON TOP AND TIMBER CEILING BOARDS AT THE BOTTOM
INSULATION: 50 MM GLASS WOOL INSULATION BLANKET UNDERNEATH FLOOR BOARDS
CEILING: 16 X 114 MM TIMBER TONGUE AND GROOVE BOARDS SUSPENDED FROM CEILING BRANDERINGS
SERVICE SPACE: 490 MM CEILING SPACE FOR ELECTRICAL AND PLUMBING USAGE

BALUSTRADE
POSTS: 50 X 50 MM TIMBER VERTICAL ELEMENTS, SPACED AT 402.2 MM CENTRES, WITH A HEIGHT OF 830 MM FROM FINISHED FLOOR LEVEL
HORIZONTAL ELEMENTS: 30 MM TIMBER RODS, NAILED TO POSTS, AT 285 MM CENTRES FROM THE RAILING AND THE FINISHED FLOOR LEVEL
RAILING: 75 X 75 MM TIMBER PROFILE

SHAFT WALL
 300 MM ON-SITU LOAD-BEARING REINFORCED CONCRETE WALL ON REINFORCED CONCRETE STRIP FOUNDATION
CONCRETE RETAINING WALL AND FOUNDATION
RETAINING WALL: 300 MM ON-SITU REINFORCED CONCRETE
RETAINING WALL WATERPROOFING: 4 MM THICK OF A TYPE APP (ATACTIC POLYPROPYLENE) WAX MODIFIED BITUMENE MEMBRANE, PROTECTED BY A SINGLE SKIN BRICKWORK OF 75 X 110 X 220 MM WITH 10 MM MORTAR JOINT
FOUNDATION: 15 MPA REINFORCED CONCRETE PAD CONFIGURATION

SURFACE BED
SURFACE BED: 150 MM 6:3:1 CONCRETE BED ON 50 MM BLINDING
WATERPROOFING: 0.25 MM SMOOTH GREEN POLYELIFIN MEMBRANE FOLDED UP AGAINST FOUNDATION WALL AND SEALED BY THE LAPS

TIMBER DOUBLE-COLUMN VS. GROUND CONNECTION
CONNECTOR: TIMBER DOUBLE-COLUMN PINNED ONTO CONCRETE BASE VIA GALVANISED STEEL CONNECTOR - 88 X 88 MM COLD-ROLLED SQUARE HOLLOW PROFILE WELDED ONTO 300 X 300 X 10 MM GALVANISED STEEL PLATE, PINNED ONTO 300 X 300 MM CONCRETE BASE
FOUNDATION: 15 MPA REINFORCED CONCRETE STRIP FOOTING

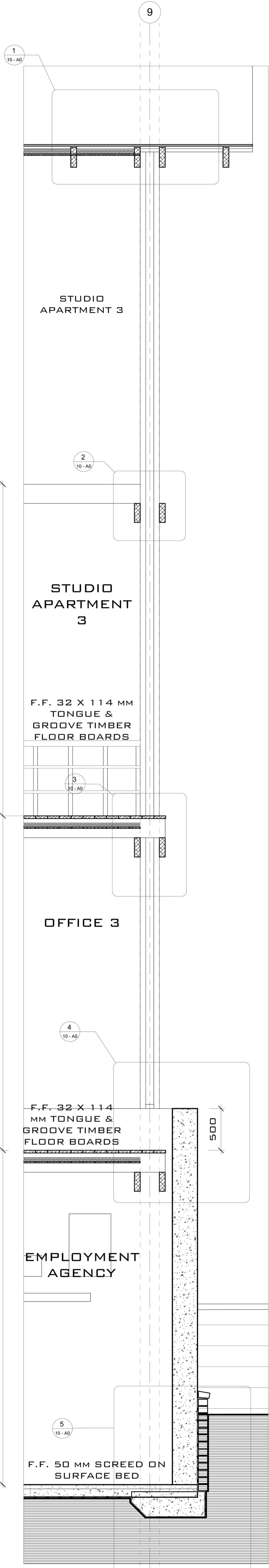


WALL SECTION 2 1:20 - 3/6/AD

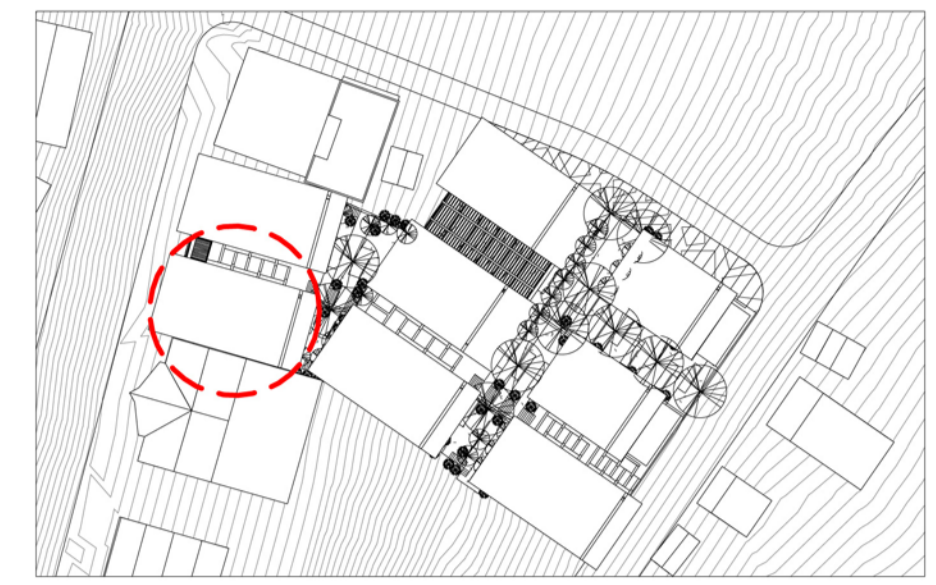
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7. RENTABLE SPACES - 1.100 LONGITUDINAL & 1.20 WALL SECTIONS

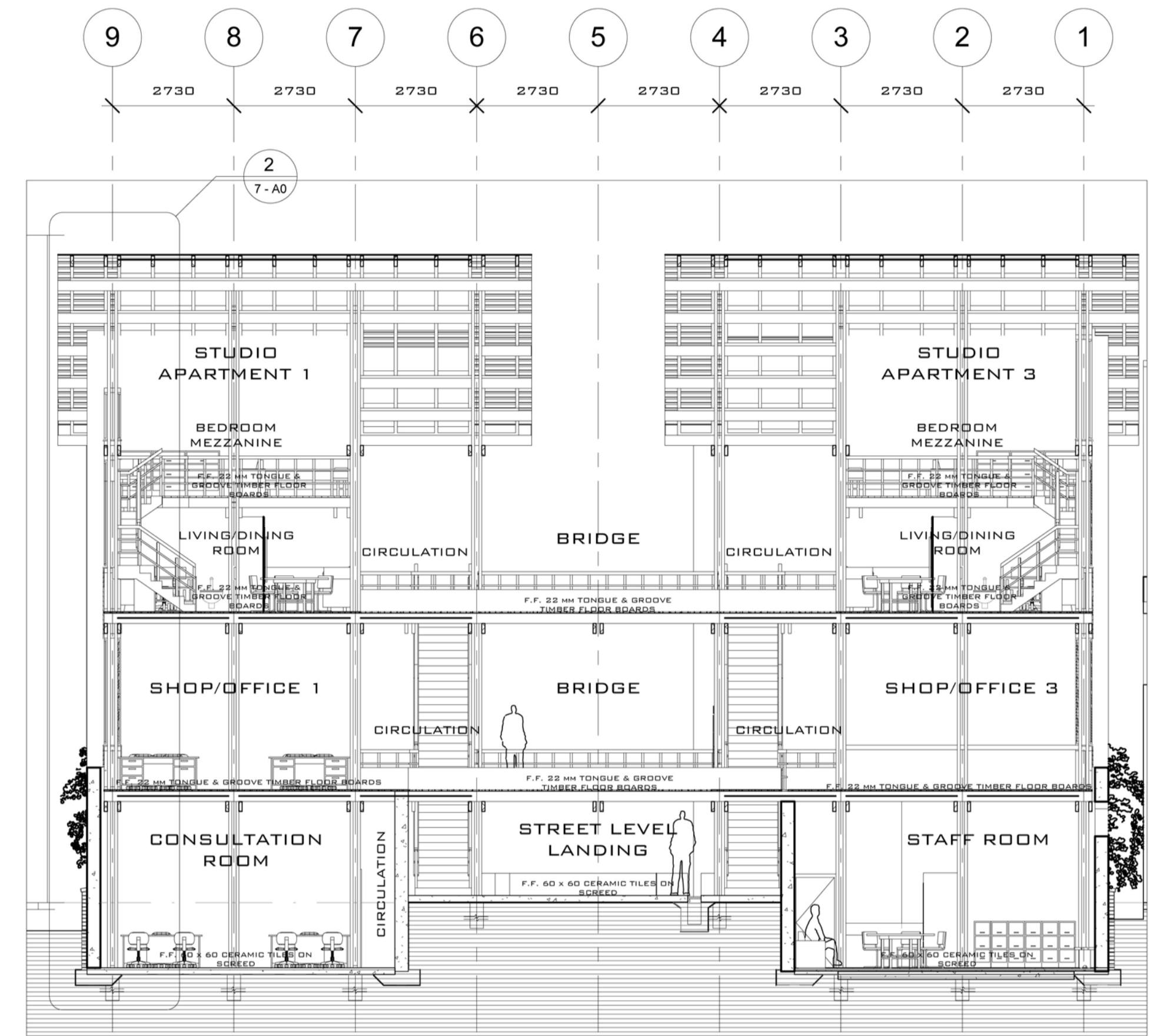
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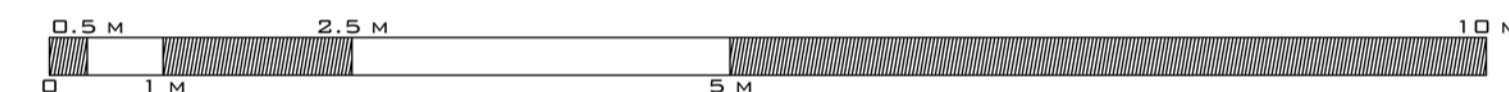
WALL SECTION 3
1:20 - 2/7/A0



LOCATION PLAN
1:1 000



LONGITUDINAL SECTION THROUGH
EMPLOYMENT AGENCY + SHOPS & OFFICES +
STUDIO APARTMENTS
1:100 - 1/7/A0



ROOF
SHEETING: COR-TEN AZP (TM) PREPAINTED GALVALUME STEEL CORRUGATION, SPANNING AT 941 MM, FIXED ONTO PURLINS
ROOF INSULATION: MINERAL FIBRE BLANKET FITTED IN BETWEEN 50 x 150 MM BATTENS/PURLINS (CEILING BRANDING)
STRUCTURE 1: TIMBER RAFTERS CONSISTING OF A DOUBLE BEAM SYSTEM OF 70 x 228 MM ELEMENTS, SPANNING AT 2824 MM, SPACED AT 2728 MM CENTRES
STRUCTURE 2: PARALELL WITH MAIN RAFTERS: 70 x 228 MM ELEMENTS, SPANNING AT 2820 MM, SPACED AT 910 MM CENTRES
STRUCTURE 3: PARALELL WITH MAIN RAFTERS: 70 x 228 MM ELEMENTS, SPANNING AT 2820 MM, SPACED AT 910 MM CENTRES
STRUCTURE 4: PARALELL WITH MAIN RAFTERS: 70 x 228 MM ELEMENTS, SPANNING AT 2820 MM, SPACED AT 910 MM CENTRES
STRUCTURE 5: PARALELL WITH MAIN RAFTERS: 70 x 228 MM ELEMENTS, SPANNING AT 2820 MM, SPACED AT 910 MM CENTRES
STRUCTURE 6: PARALELL WITH MAIN RAFTERS: 70 x 228 MM ELEMENTS, SPANNING AT 2820 MM, SPACED AT 910 MM CENTRES
STRUCTURE 7: PARALELL WITH MAIN RAFTERS: 70 x 228 MM ELEMENTS, SPANNING AT 2820 MM, SPACED AT 910 MM CENTRES
STRUCTURE 8: PARALELL WITH MAIN RAFTERS: 70 x 228 MM ELEMENTS, SPANNING AT 2820 MM, SPACED AT 910 MM CENTRES
STRUCTURE 9: PARALELL WITH MAIN RAFTERS: 70 x 228 MM ELEMENTS, SPANNING AT 2820 MM, SPACED AT 910 MM CENTRES
CEILING BOARDS: 16 x 114 MM TONGUE AND GROOVE TIMBER BOARDS, SPANNING AT 960 MM, NAILED ONTO BRANDING WITH STAGGERED END JOINTS AT RIGHT ANGLES WITH RAFTERS
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NORTH AND SOUTH DRY WALL SYSTEM
PRIMARY NOGGINGS: TOP AND BOTTOM ELEMENTS 100 x 368 MM
SECONDARY NOGGINGS: 52 x 152 MM
STUDS: 50 x 150 MM AT 450 MM CENTRES
IN-BETWEEN LAYER: INSULATION BATTS
OUTSIDE CLADDING: 22 x 114 MM TIMBER BOARDS
INSIDE CLADDING: 22 x 114 MM TONGUE AND GROOVE BOARDS

NORTH AND SOUTH OPENINGS:
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INSIDE OPENINGS: WITH 8 MM LAMINATED GLAZING FRAMED IN ALUMINIUM SUBFRAMES TO ALLOW THE GLASS LOUVRES TO ROTATE FROM 0 TO 85 DEGREES
WEATHERPROOFING: 16 MM TIMBER PROFILE WITH A DRIP AS OPENING SILL

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INSULATION: 50 MM GLASS WOOL INSULATION BLANKET UNDERNEATH FLOOR BOARDS
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SERVICE SPACE: 490 MM CEILING LEFT OVER SPACE FOR ELECTRICAL AND PLUMBING USAGE

BALUSTRADE
POSTS: 50 x 50 MM TIMBER VERTICAL ELEMENTS, SPACED AT 402.2 MM CENTRES, WITH A HEIGHT OF 830 MM FROM FINISHED FLOOR LEVEL
HORIZONTAL ELEMENTS: 30 MM TIMBER RODS, SECRETLY NAILED TO POSTS, AT 285 MM CENTRES FROM THE RAILING AND THE FINISHED FLOOR LEVEL
RAILING: 75 x 75 MM TIMBER PROFILE

SHAFT WALL
 300 MM ON-SITU LOAD-BEARING REINFORCED CONCRETE WALL ON REINFORCED CONCRETE STRIP FOUNDATION

CONCRETE RETAINING WALL AND FOUNDATION
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FOUNDATION: 15 MPA REINFORCED CONCRETE STRIP FOOTING



8. RENTABLE SPACES - 1.5 DETAILS - PART I

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