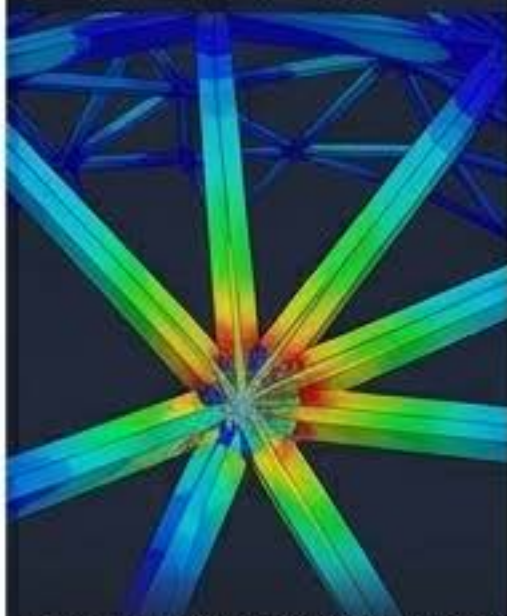




MORPHOGENETIC STRUCTURAL PERFORMANCE ANALYSIS.



STRUCTURAL STRESS DISTRIBUTION (FEA)

ADAPTIVE NODE GEOMETRY



SPATIAL SYNTAX AND PEDESTRIAN FLOW ANALYSIS.

SPATIAL SYNTAX STUDY



CIRCULATION
— Main Path
— Secondary Path
— Accessible Route

MULTILAYER CARAPACE SKIN (with integrated tessellation logic)

CUSTOM-MILLED SPACE FRAME SUBSTRUCTURE

- 1. MATTE COMPOSITE FACADE UNIT
- 2. HIGH-OPTIMIZED SPACE FRAME NODE
- 3. INTEGRATED LUMINAIRE STRIP (LED)

4. INTERNAL BRIDGES (ANGLE A AND T.F.F)

SPATIAL SYNTAX STUDY

CULTURAL ATRIUM VOID

GALLERY ZONES A & B

ACCESSIBLE RAMPS & LIFTS NETWORK



ANGLE D - MACRO SECTION DETAIL

INTERNAL NUCLEUS (revealed cores)

FLOOR SLAB INTERSECTION

GALLERY GALLERY ZONE SLABS (showing detailed floor finishes)

CLIMATE LANDSCAPE SYSTEM

PASSIVE STACK EFFECT VENTILATION

EVAPORATIVE COOLING PLENUMS (with integrated water feature details)

SUBTERRANEAN FOUNDATION & UTILITY PLENUM

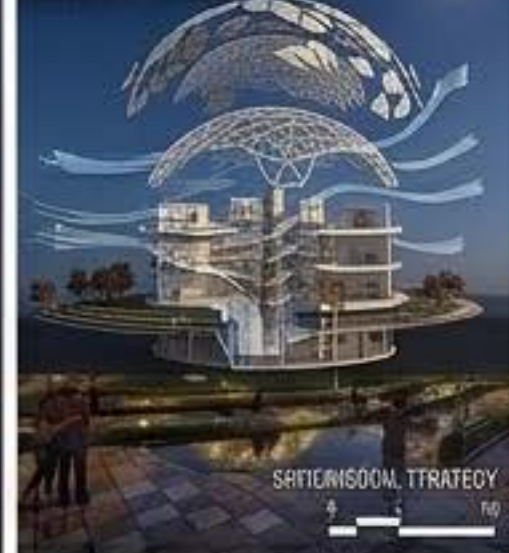
INTEGRATED TECTONIC ASSEMBLY & LIGHTING JOINT DETAIL.



MULTI-LEVEL GALLERY LAYER (re-rendered with Nanite-level interior detail and scale figures)

CLIMATIC PERFORMANCE & ENERGY STRATEGY.

CLIMATIC STRATEGY



CLIMATE LANDSCAPE SYSTEM



COCOON PAVILION - NIGHT STUDY - ULTRA-OENIENSI

ANGLE A - INTERNAL PERSPECTIVE

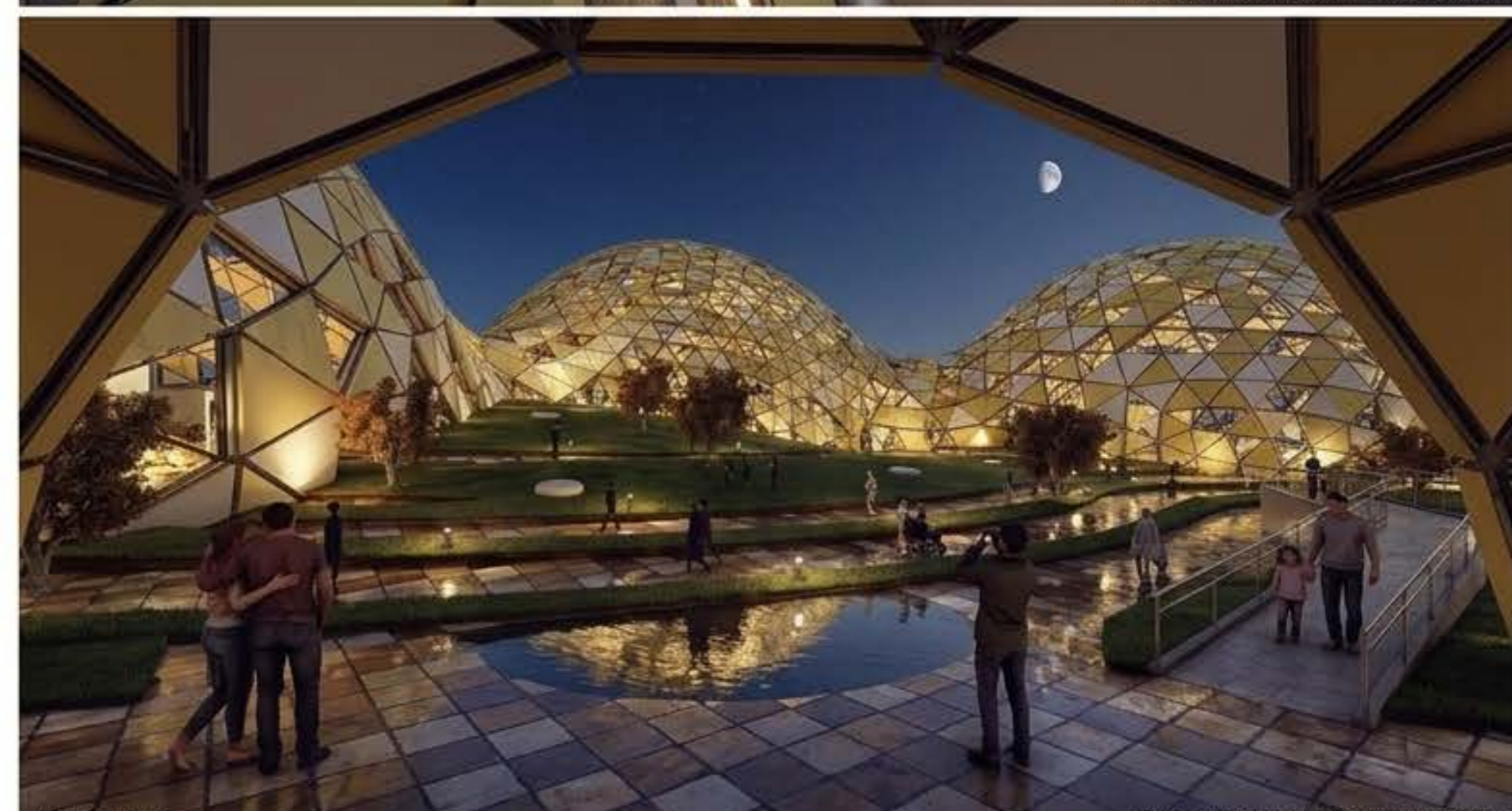


ANGLE D - MACRO SECTIONAL TECTONIC ASSEMBLY



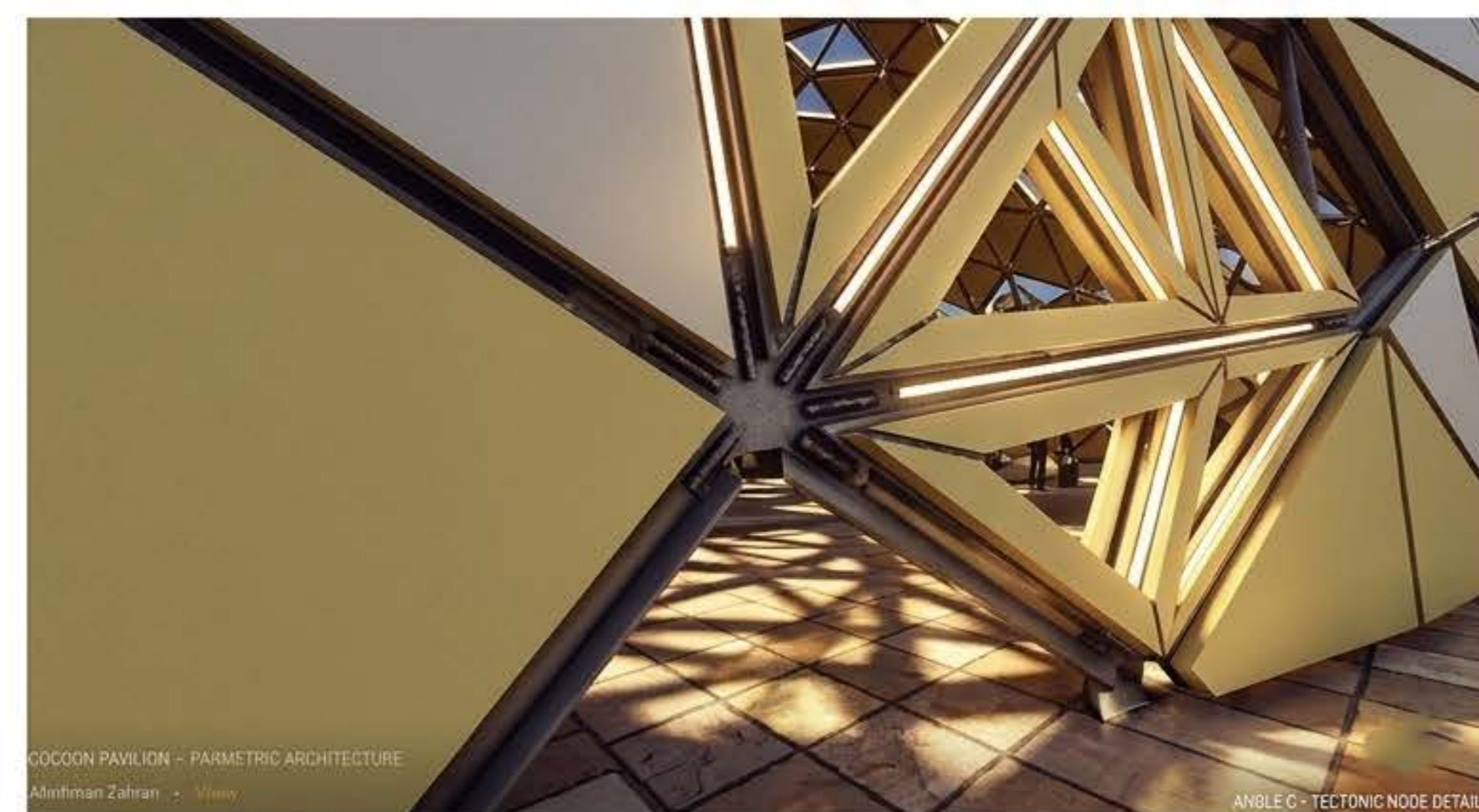
0056M - 0000 SCALLS

ANGLE B - LANDSCAPE PATH PERSPECTIVE



0056M - 0000 SCALLS

ANGLE E - LANDSCAPE INTEGRATION PERSPECTIVE



COCOON PAVILION - PARAMETRIC ARCHITECTURE

Alfrahman Zahran - View

ANGLE C - TECTONIC NODE DETAIL



COCOON PAVILION - PARAMETRIC ARCHITECTURE

Alfrahman Zahran - View

ANGLE F - INTERIOR SPACE FRAME EXPERIENCE

01.



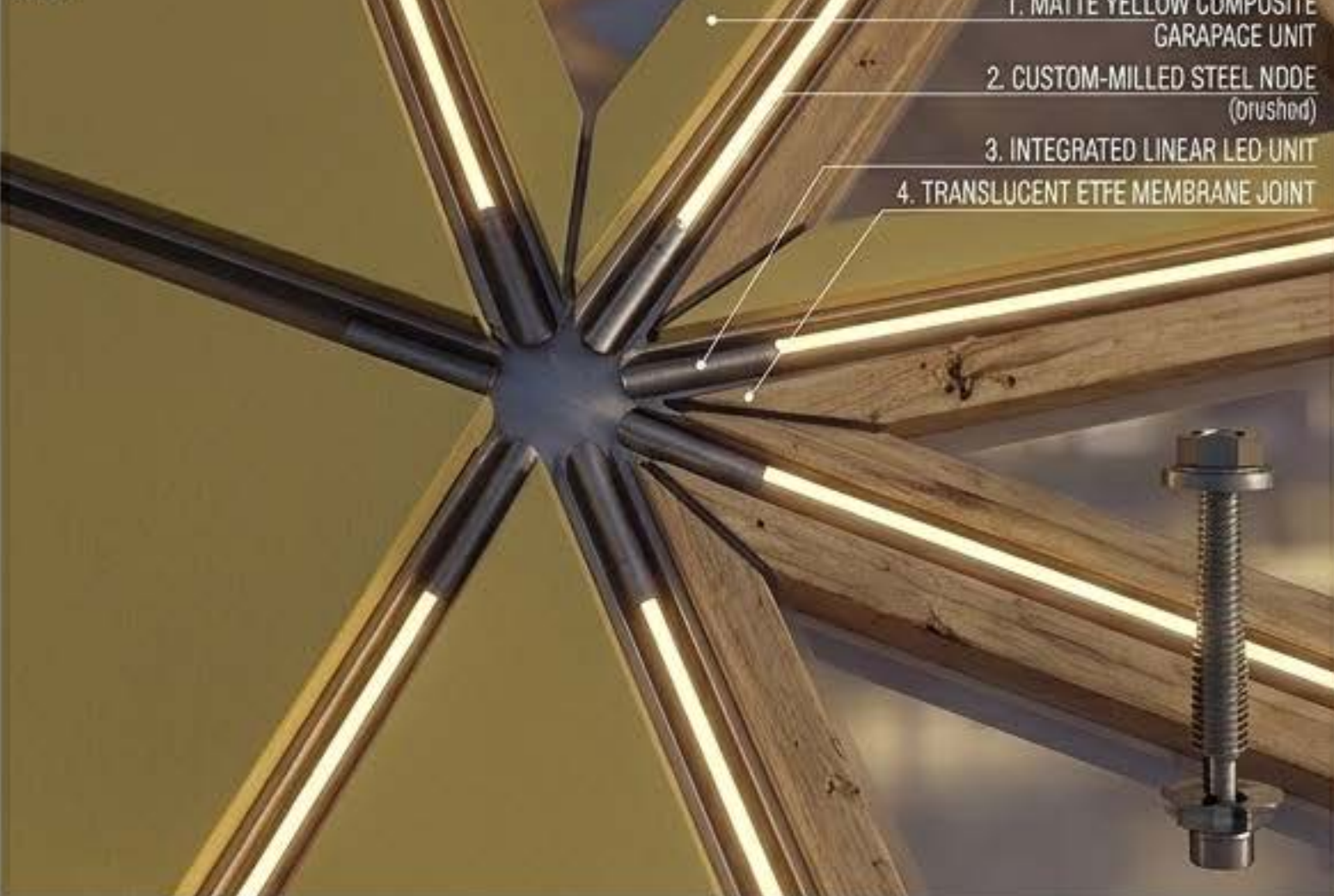
BIOMIMETIC CARAPACE & LANDSCAPE

02.



MULTI-LEVEL GALLERY ATRIUM

03.



- 1. MATTE YELLOW COMPOSITE GARAPACE UNIT
- 2. CUSTOM-MILLED STEEL NODE (brushed)
- 3. INTEGRATED LINEAR LED UNIT
- 4. TRANSLUCENT ETFE MEMBRANE JOINT

04.



PASSIVE STACK VENTILATION

EVAPORATIVE COOLING plenums (over water features)

EVAPORATIVE COOLING plenums (over water features)

4 INFRA-RED BRIDGES (angle A and TT TF)

SOLAR RESPONSE Teoscelion (optimized shading and light penetration)

ANGLE D - MACRO SECTOING NETMALL

INTERNAL MINGLES

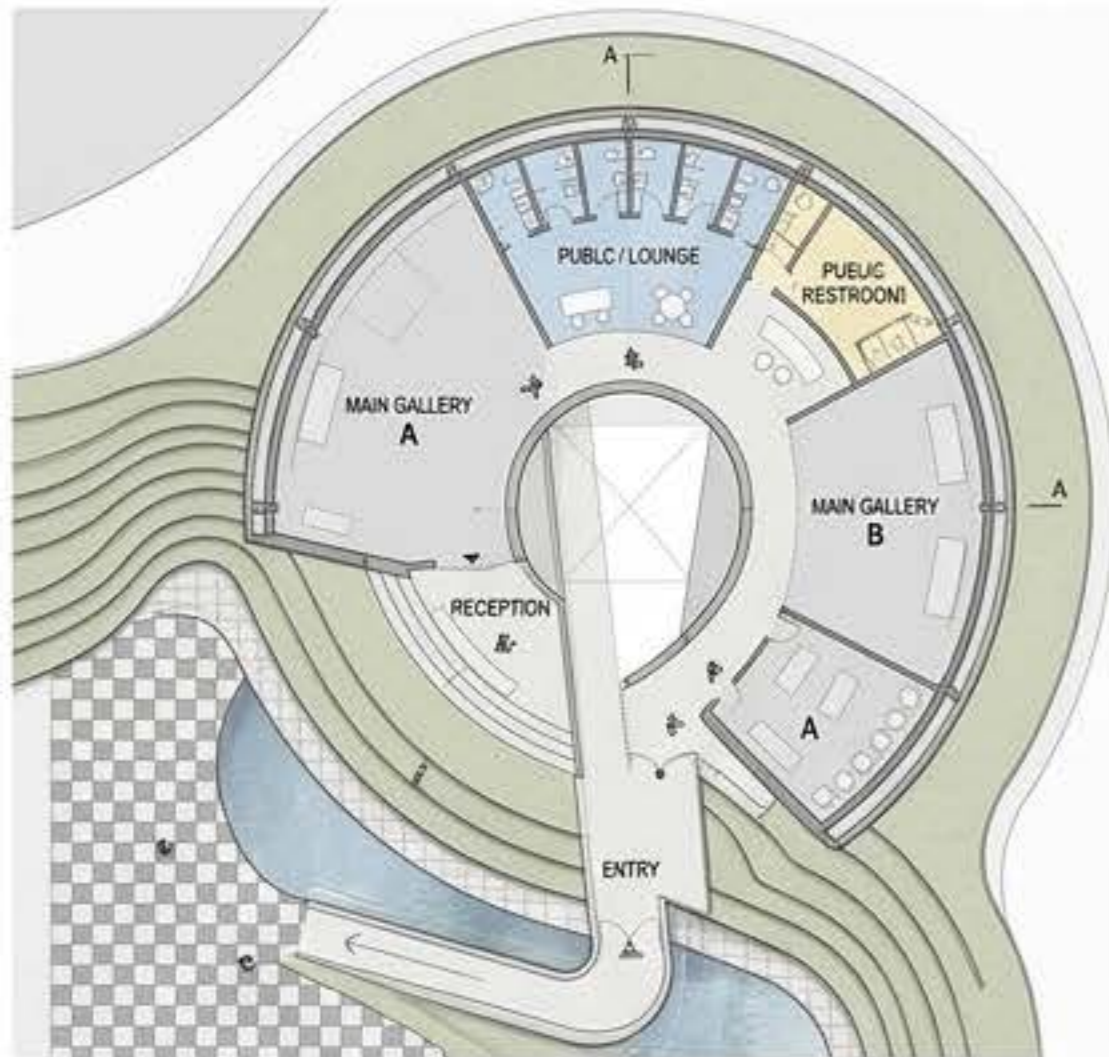
FLOOR SLAB INTERSECTION

MULTI-LEVEL GALLERY LAYERS

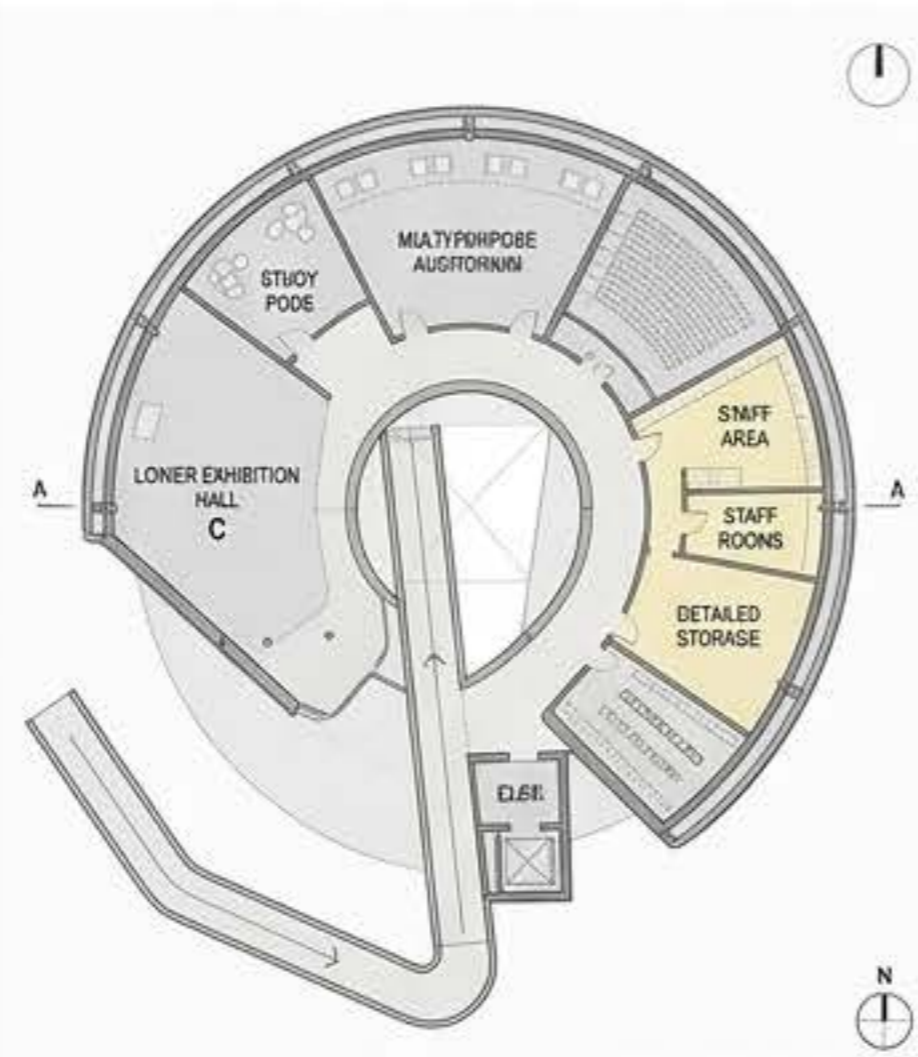
TERRACE LANDSCAPE SYSTEM

REFLECTIVE WATER FEATURE

CONCRETE SUBSTRUCTURE AND FINO



00. GROUND FLOOR PLAN



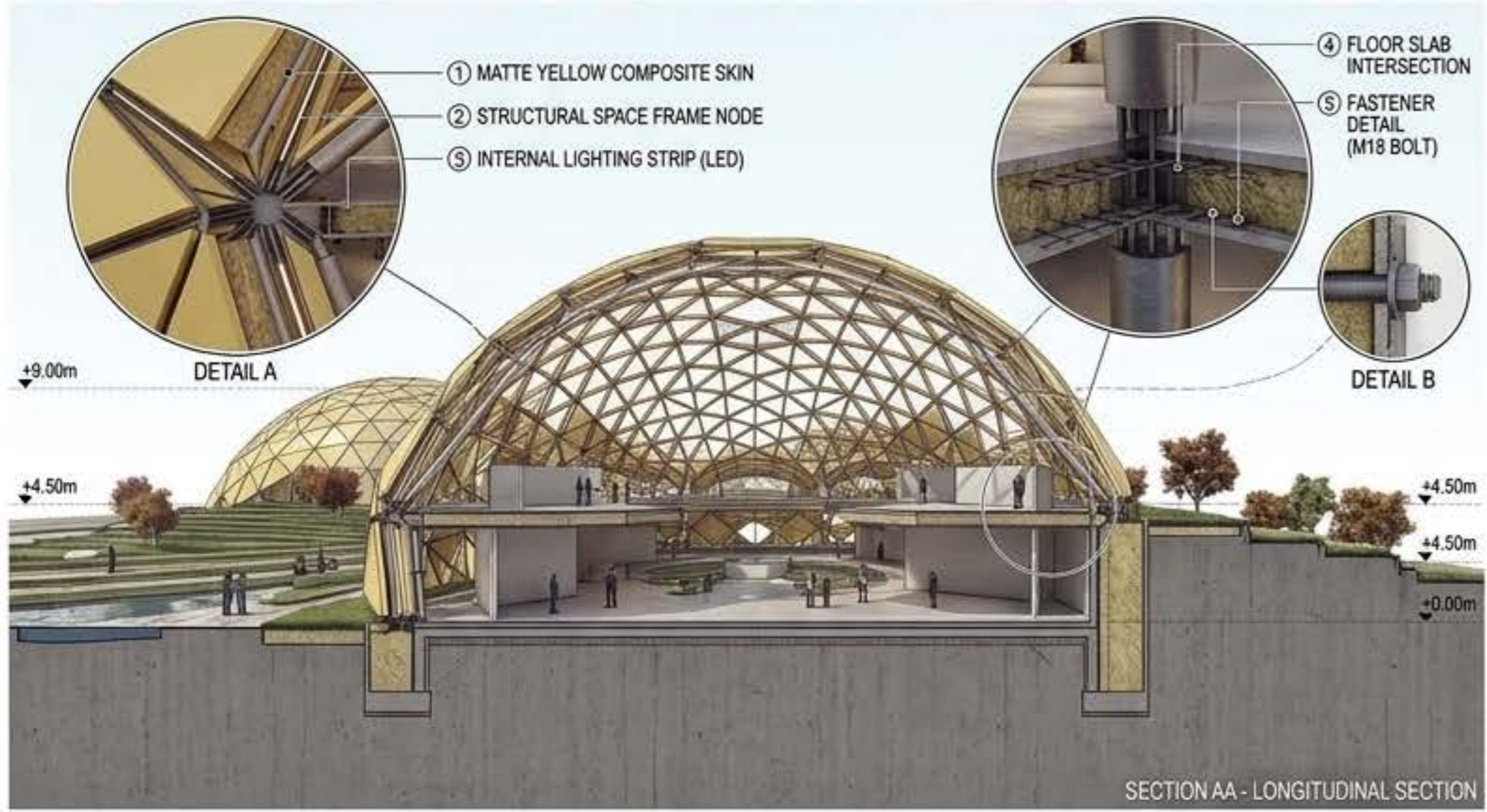
01. LOWER GROUND FLOOR PLAN



01. URBAN CONTEXT & INTEGRATION STUDY



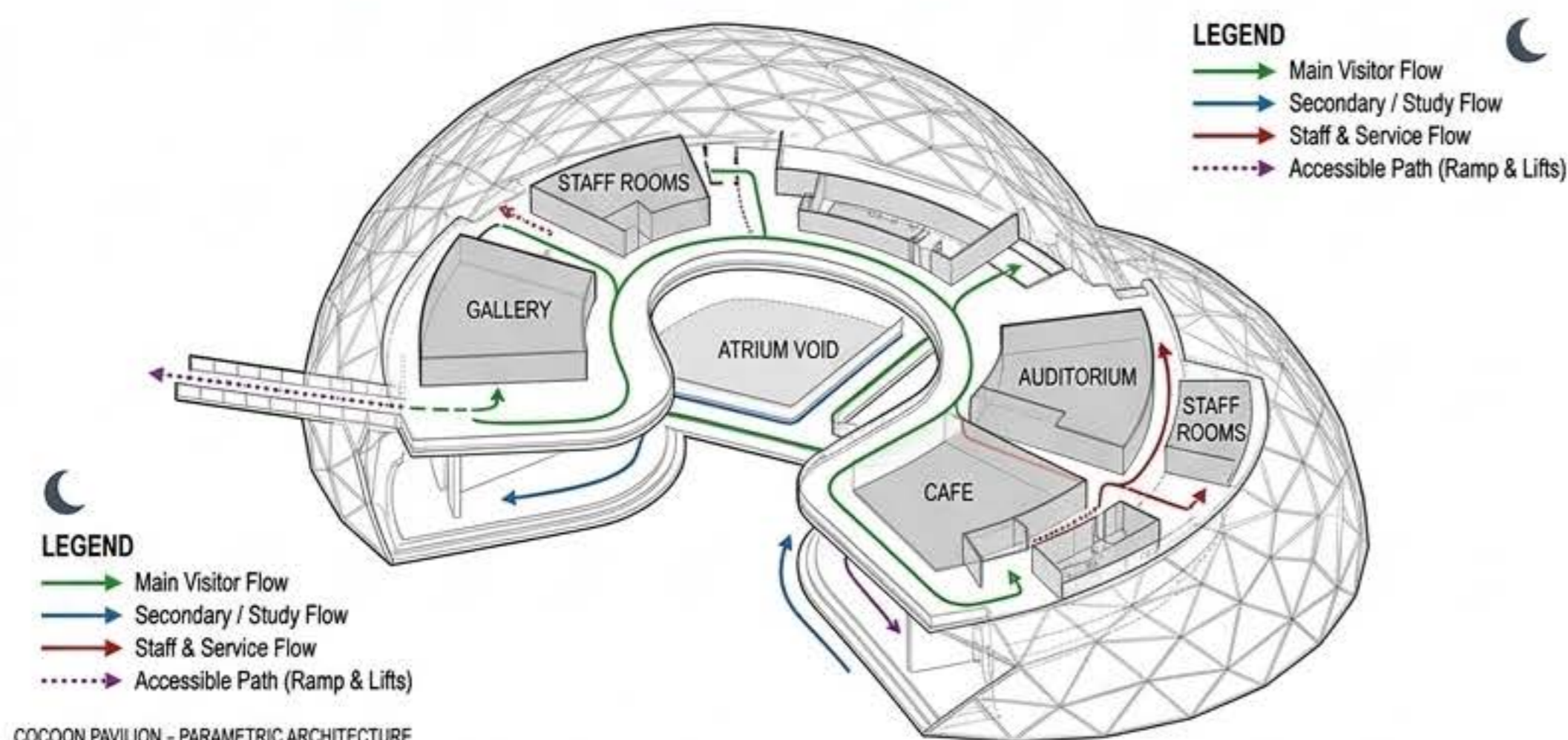
02. ULTRA-DETAILED 3D SECTIONAL PERSPECTIVE (EXPLODED)



SECTION AA - LONGITUDINAL SECTION



SECTION AA - LONGITUDINAL SECTION

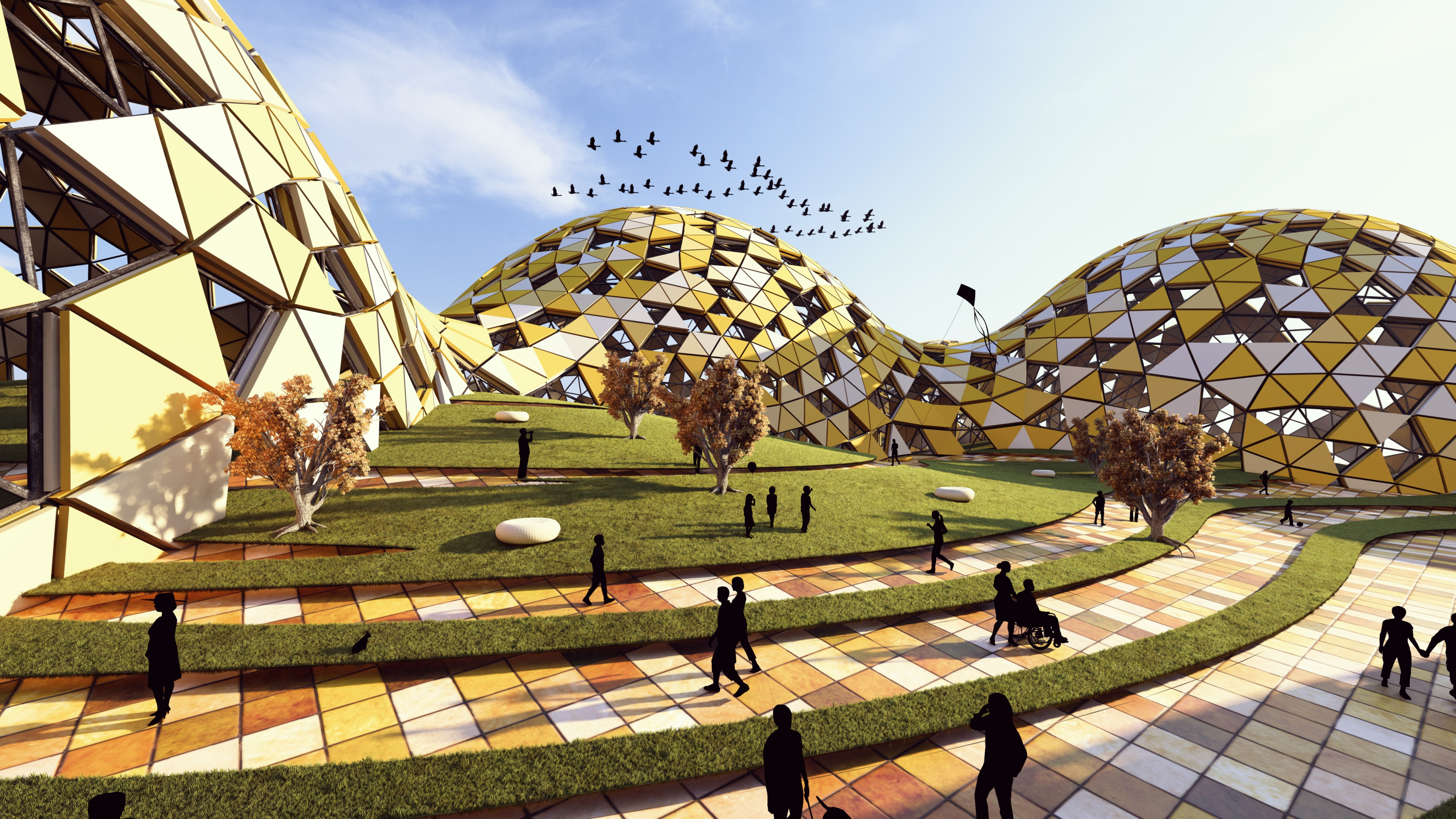


AXONOMETRIC CIRCULATION & PROGRAM ANALYSIS



03. MULTI-LEVEL URBAN PLAZA & CONNECTIVITY ANALYSIS





D1. ATRIUM VERTICAL VOID | COCOON CORE



O2. INTER-LEVEL FLOW | GALLERY ATLAS



O3. TECTONIC ASSEMBLY | NODE RESOLUTION



O4. EXTERIOR CONNECTIVITY | LANDSCAPE INTEGRATION



O3. TECTONIC ASSEMBLY | NODE RESOLUTION

O4. EXTERIOR CONNECTIVITY | LANDSCAPE INTEGRATION