



THE NATIONAL ASSEMBLY OF WALES

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LOCATION:
CARDIFF, WALES

ARCHITECT:
RICHARD ROGERS PARTNERSHIP

COMPLETION
2005
OFFICIALLY OPENED MARCH 1ST 2006

ENGINEERING FIRM:
ARUP

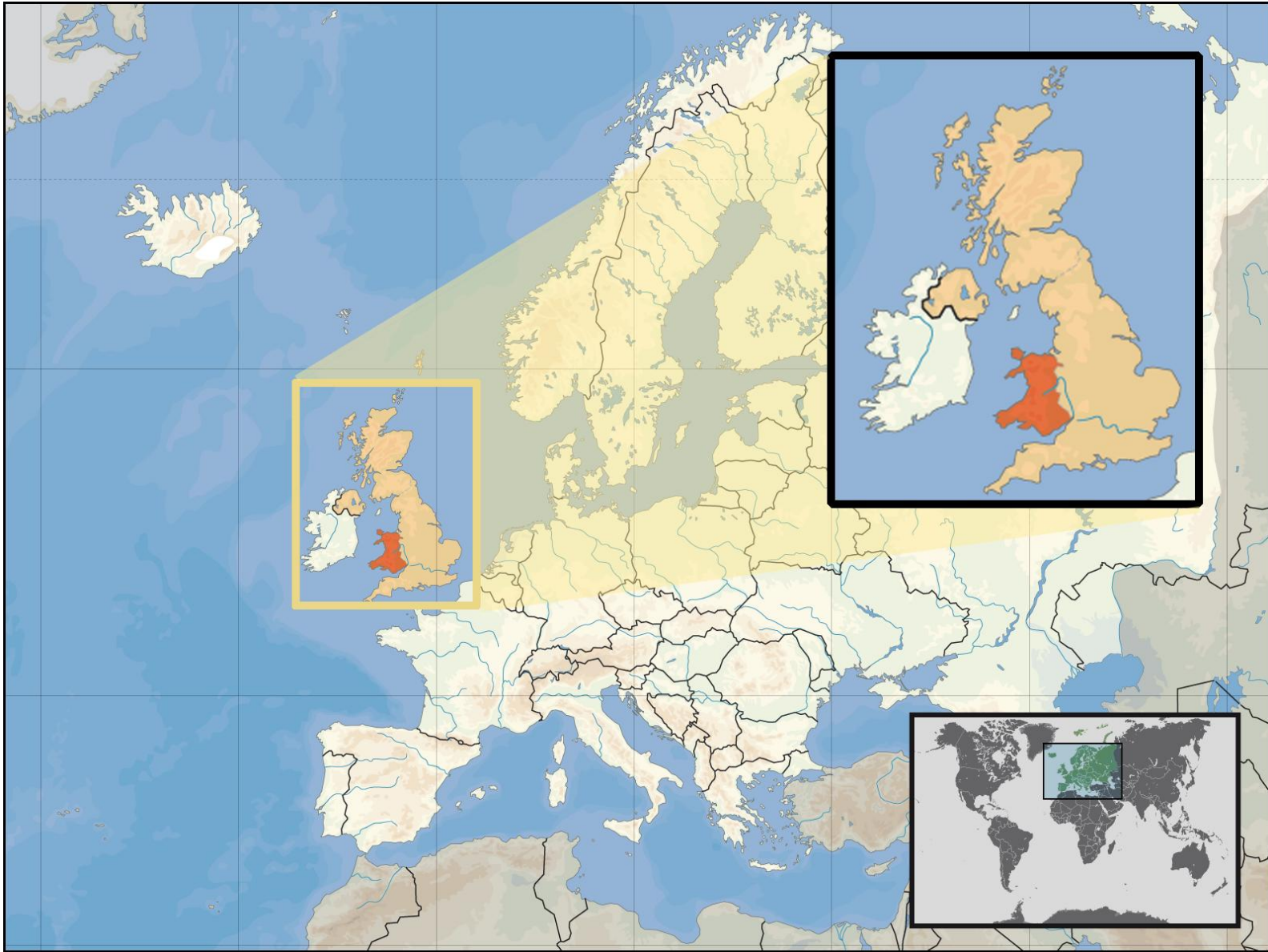
ENVIRONMENTAL CONSULTANTS:
BDSP

GENERAL CONTRACTOR:
TAYLOR WOODROW

COST:
121.5 MILLION U.S. DOLLARS



PROJECT HIGHLIGHTS



PREMISE

CRICKWELL HOUSE



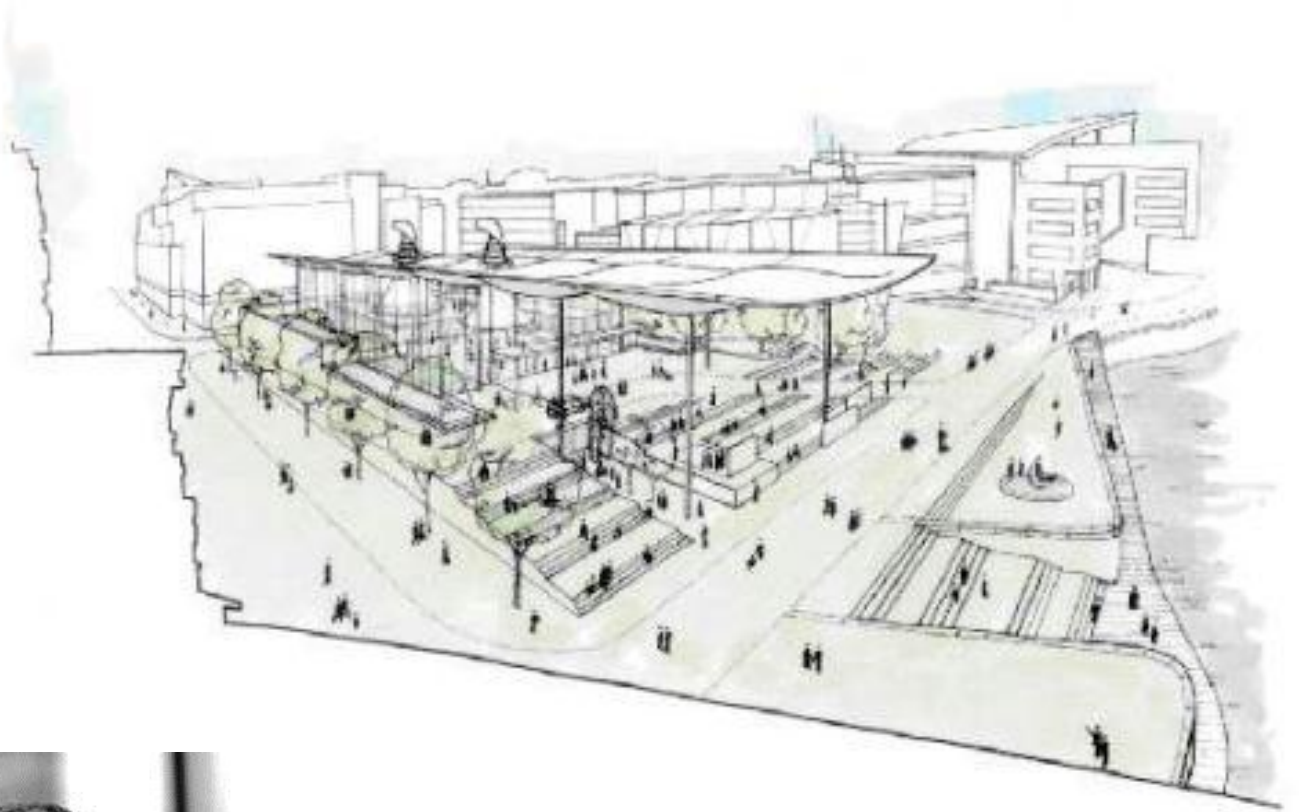
THE PIERHEAD IN 1923



PREMISE

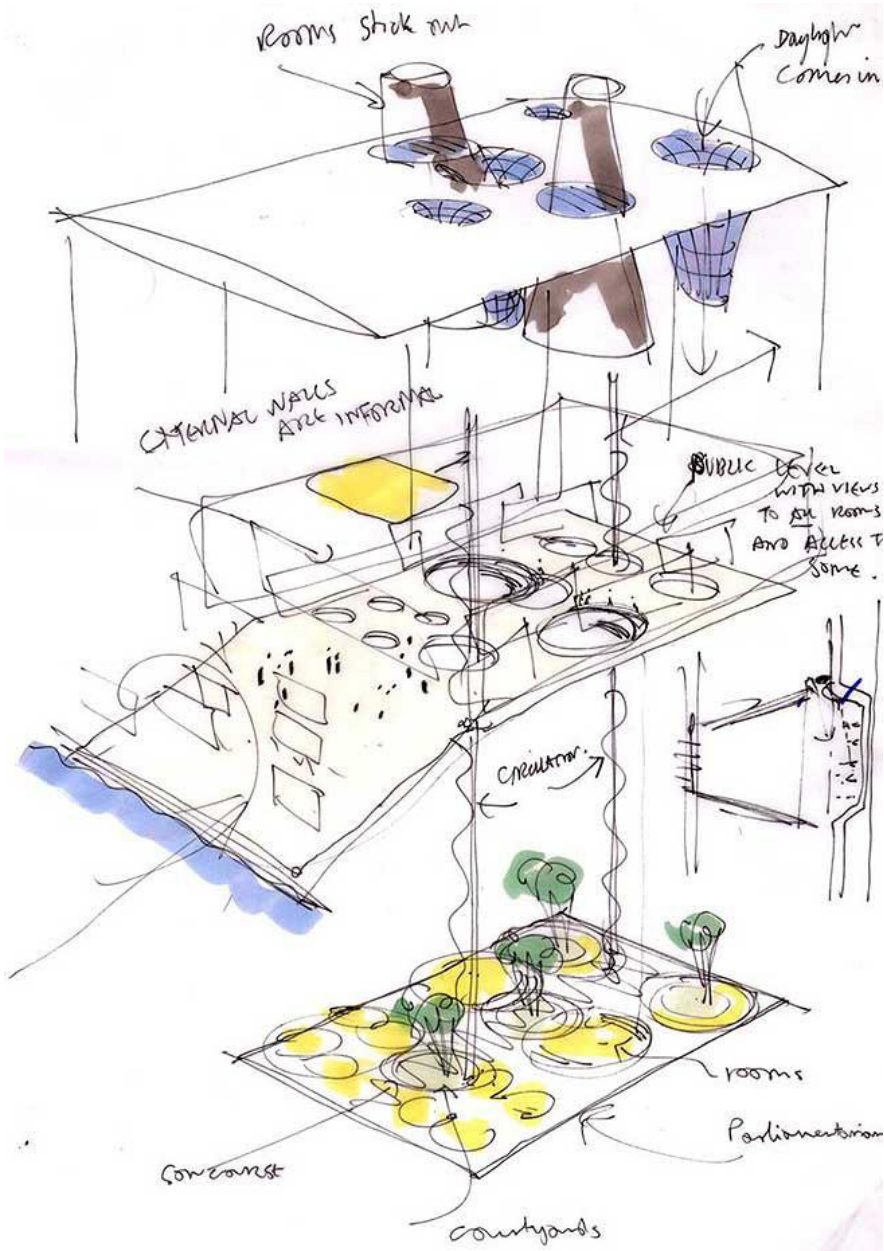


LORD CALLAGHAN



RICHARD ROGERS

RESPONSE

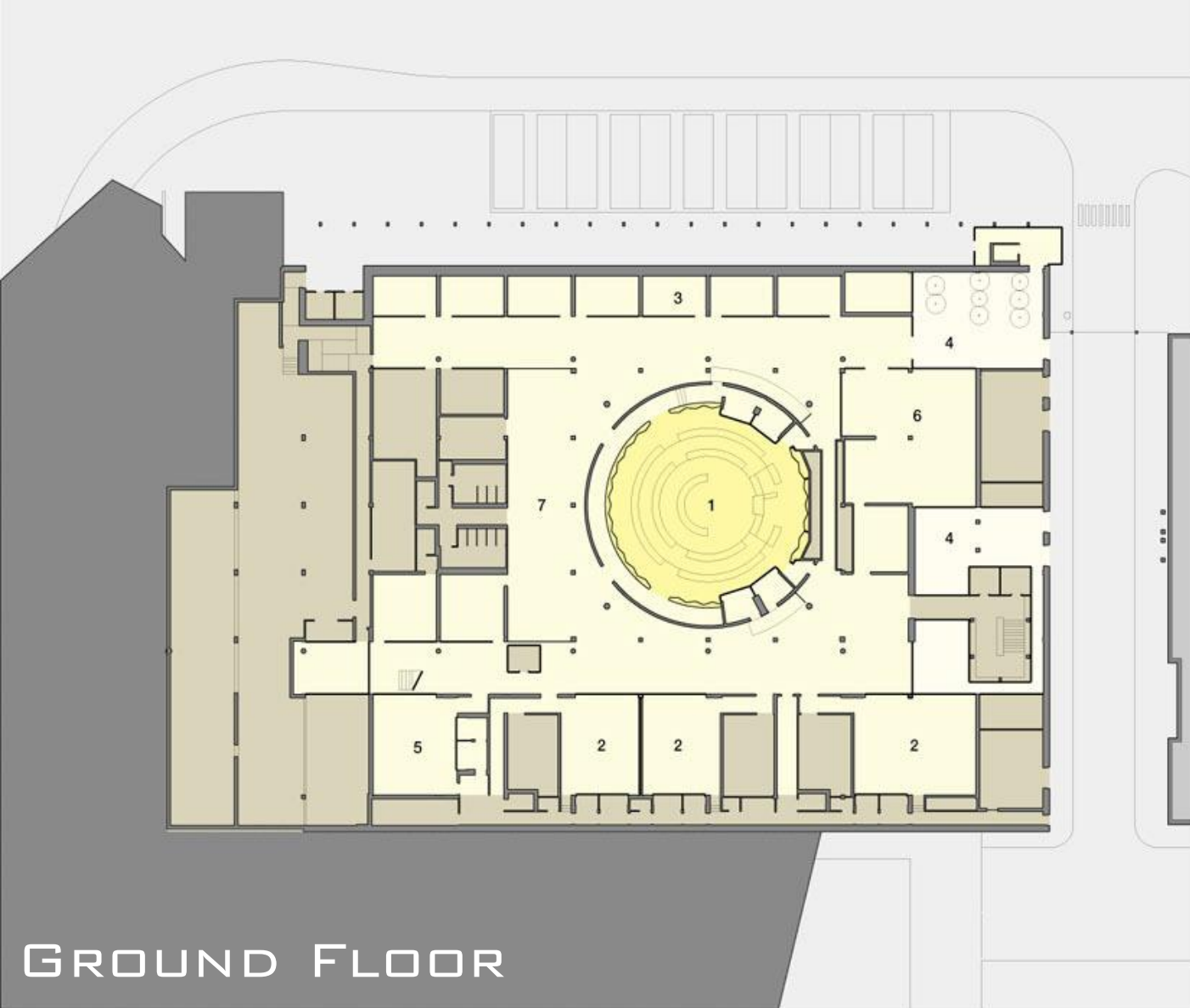


GROUND FLOOR: PRIVATE

FIRST FLOOR: OPEN TO PUBLIC

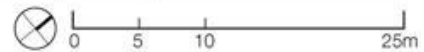
SECOND FLOOR: OPEN TO PUBLIC

DESIGN CONCEPT



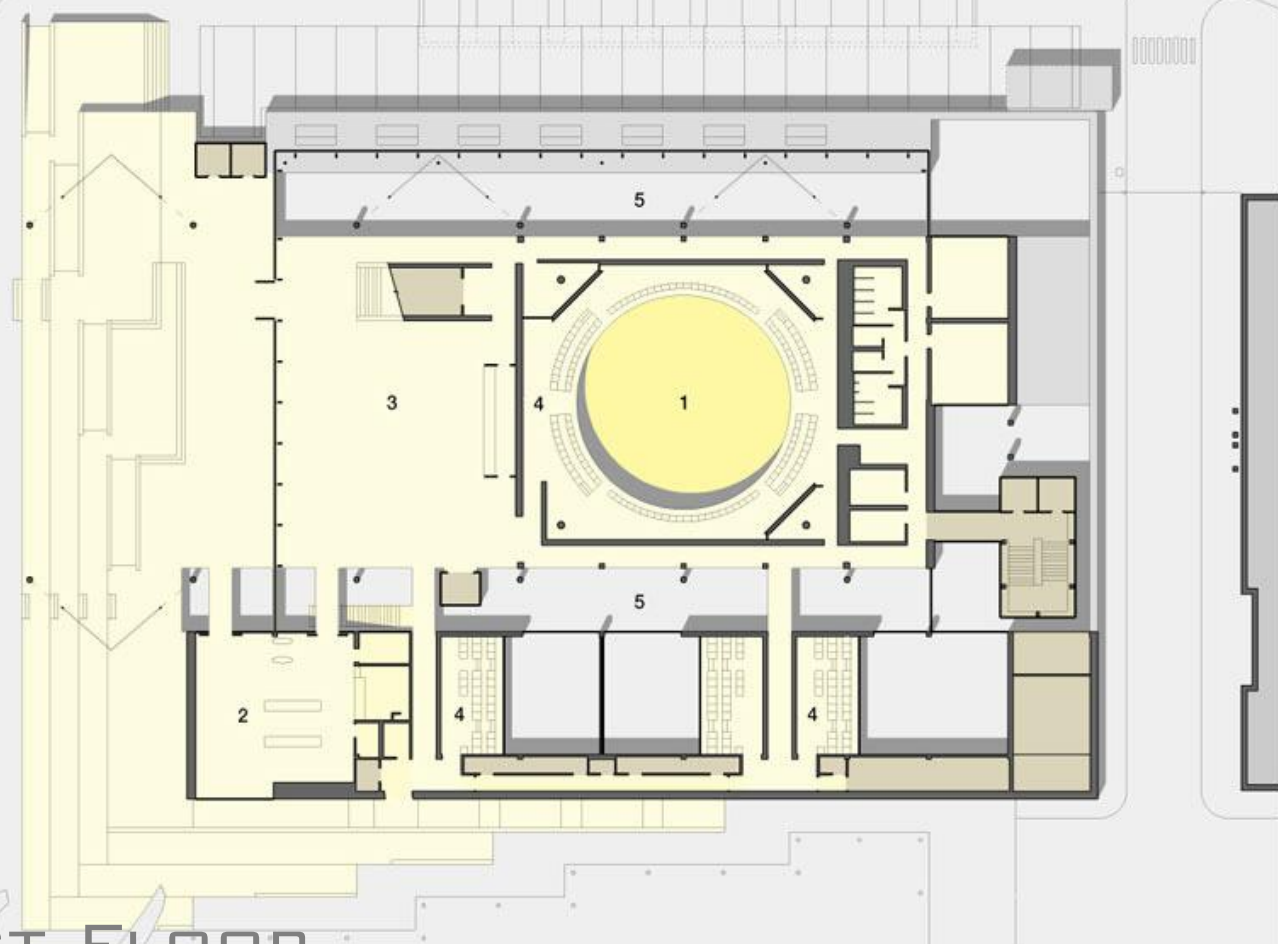
- 1 Debating Chamber
- 2 Committee rooms
- 3 Offices / Meeting rooms
- 4 Private Courtyards
- 5 Media briefing room
- 6 Members tea room
- 7 Milling space

GROUND FLOOR

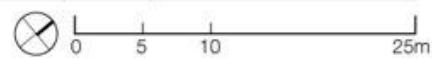


BUILDING LAYOUT

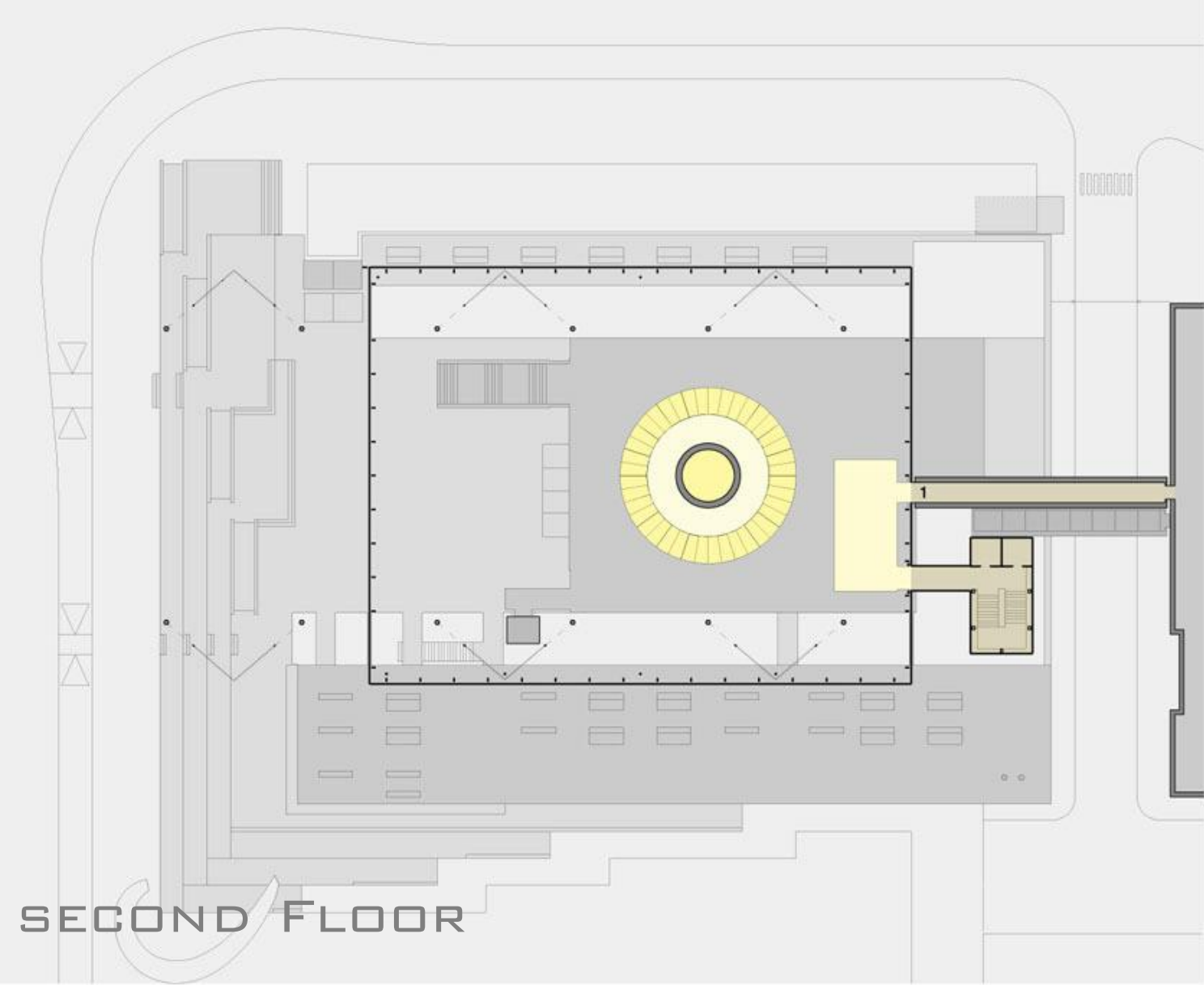
FIRST FLOOR



- 1 Debating Chamber
- 2 Security check
- 3 Foyer
- 4 Public Gallery
- 5 Void

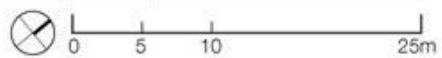


BUILDING LAYOUT

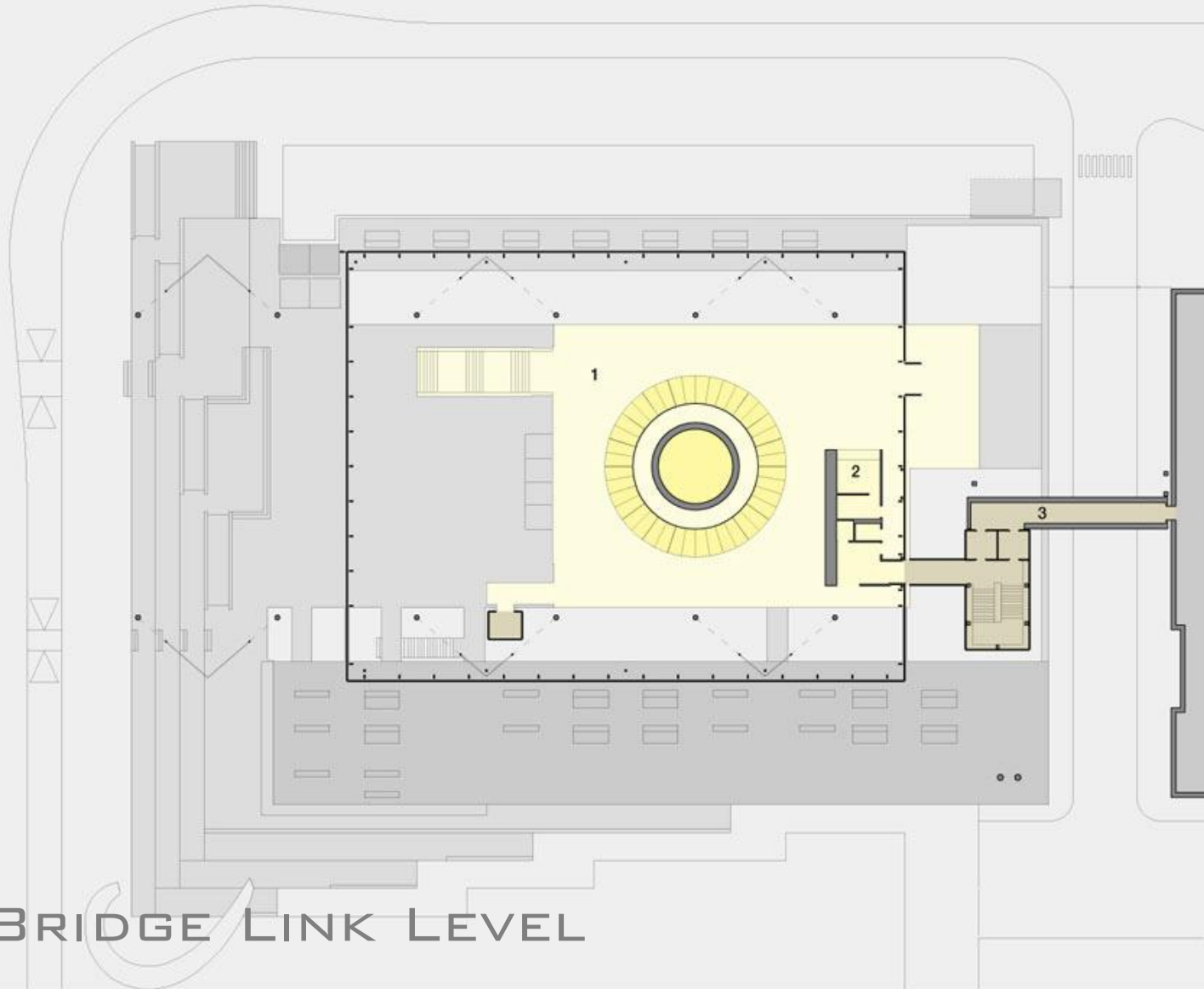


SECOND FLOOR

1 Link to existing building



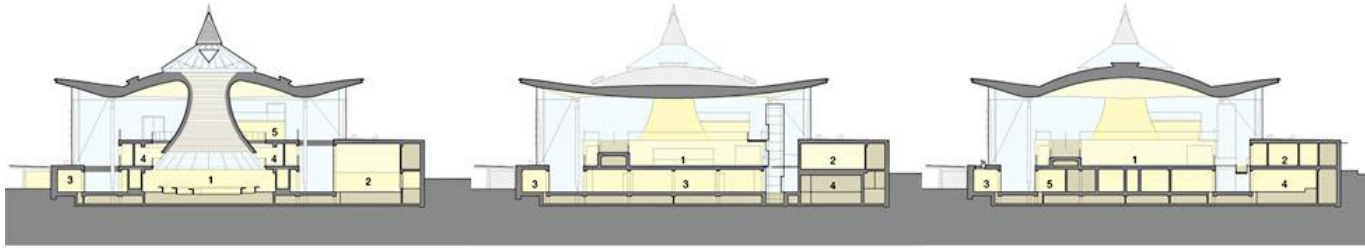
BUILDING LAYOUT



BRIDGE LINK LEVEL

- 1 Upper Foyer
- 2 Coffee Shop
- 3 Bridge link to existing building

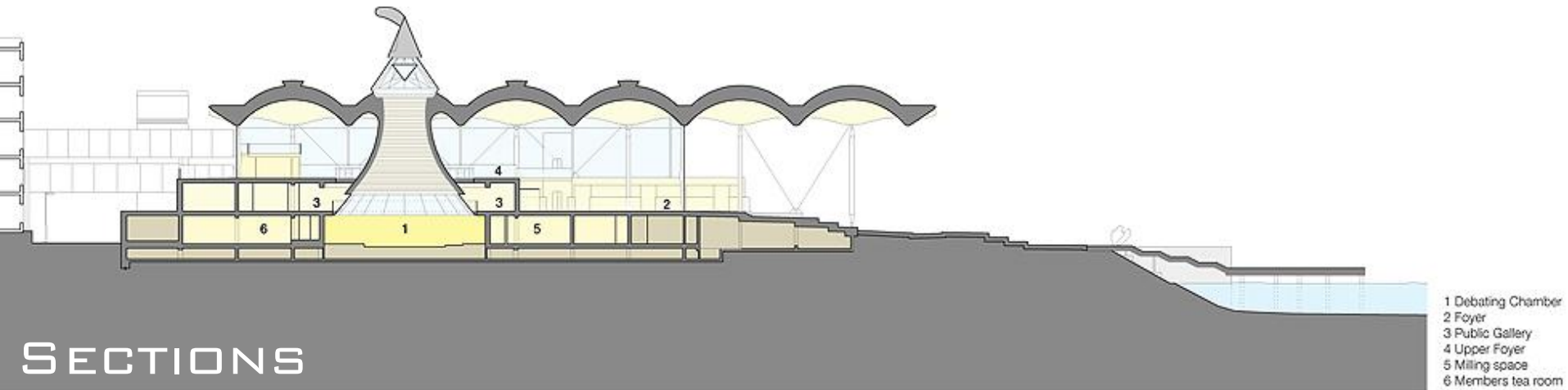
BUILDING LAYOUT



- 1 Debating Chamber
- 2 Committee rooms
- 3 Meeting rooms / Offices
- 4 Public Gallery
- 5 Upper Foyer

- 1 Foyer
- 2 Public Gallery
- 3 Meeting rooms / Offices
- 4 Offices
- 5 Milling space

- 1 Foyer
- 2 Security check
- 3 Meeting rooms / Offices
- 4 Media Briefing room
- 5 Offices

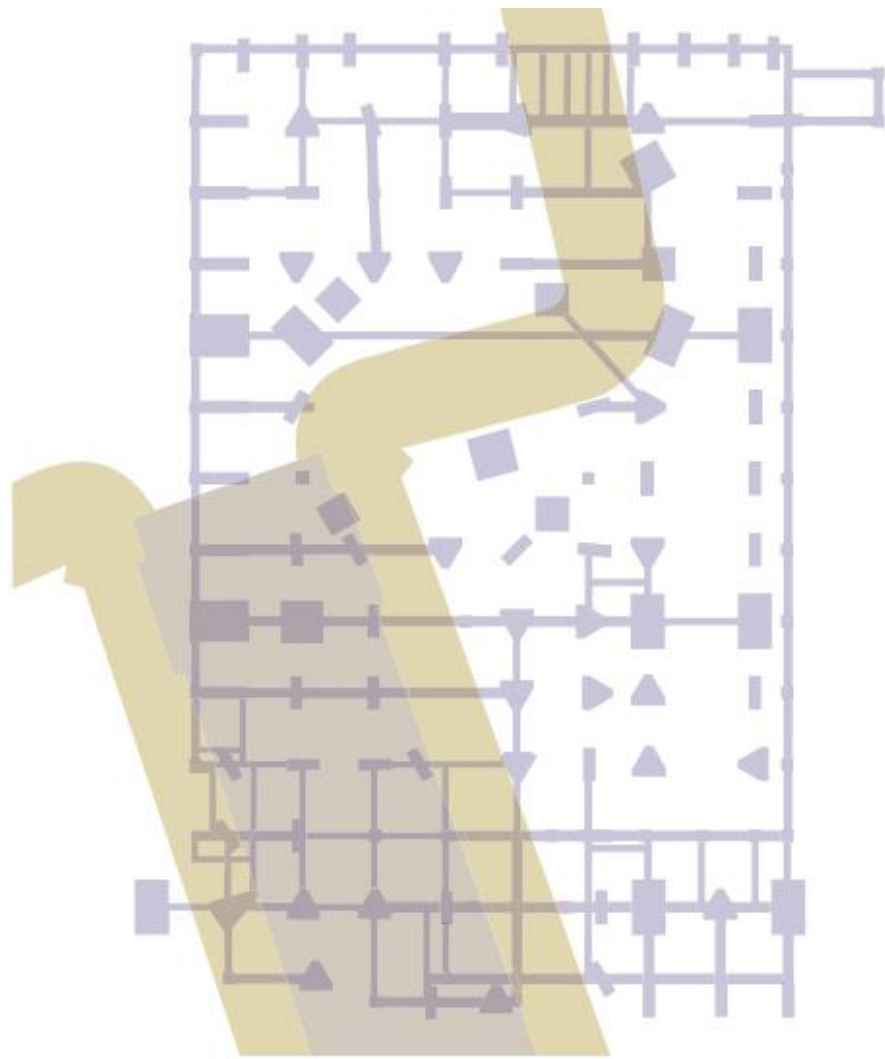


- 1 Debating Chamber
- 2 Foyer
- 3 Public Gallery
- 4 Upper Foyer
- 5 Milling space
- 6 Members tea room

SECTIONS



BUILDING LAYOUT



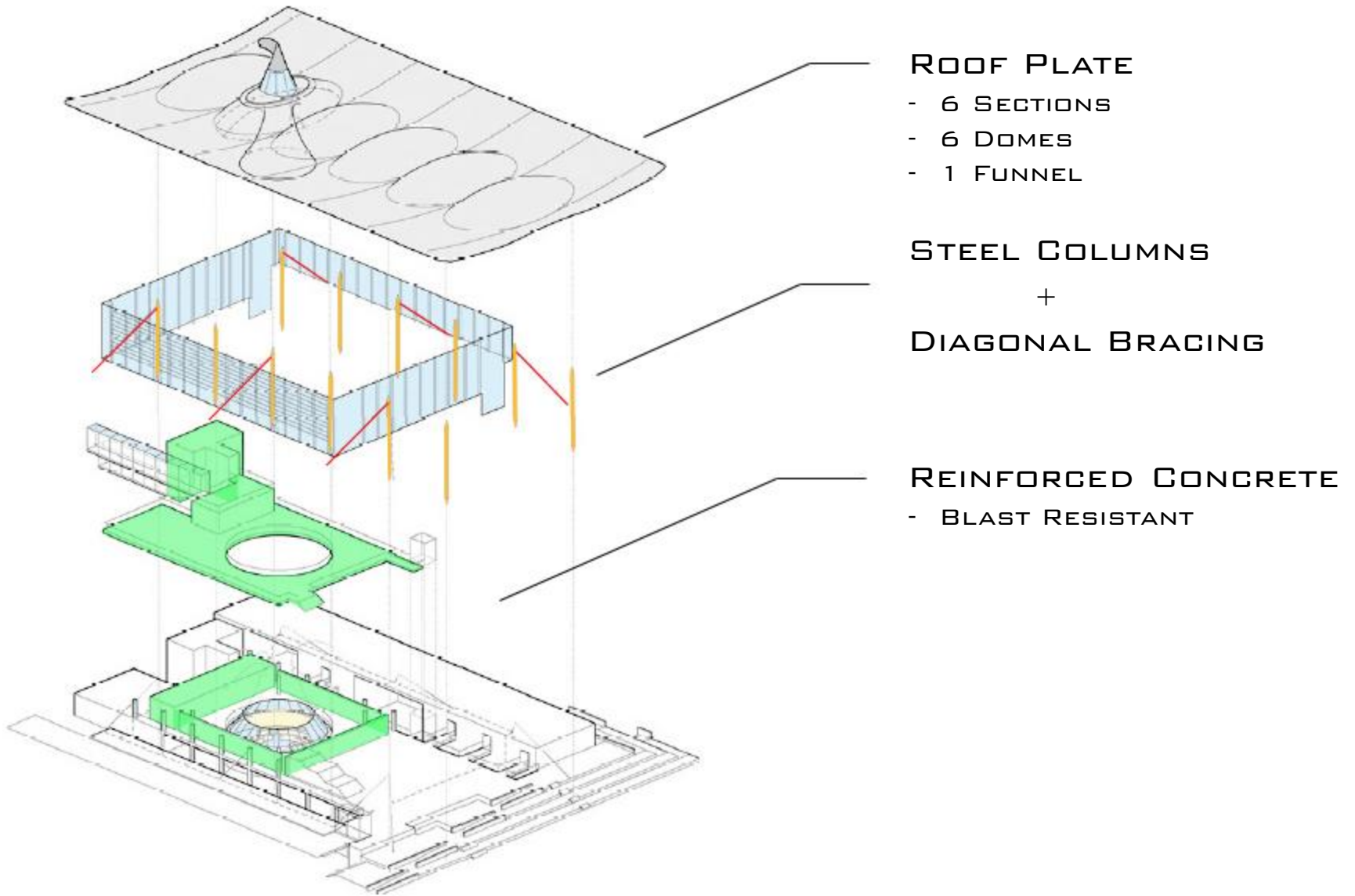
- SOIL: SOFT CLAY WITH SUBORDINATE SILTS, SANDS, GRAVEL, AND LOCAL PEAT BED
- HIGH WATER TABLE
- CAST IN PLACE BORED POLES WITH GROUND BEAMS
- EXISTING DOCK STRUCTURE REMOVED AND/OR AVOIDED

■ Pile caps/ground beams ■ Existing dock walls
■ Structural floor to sea lock

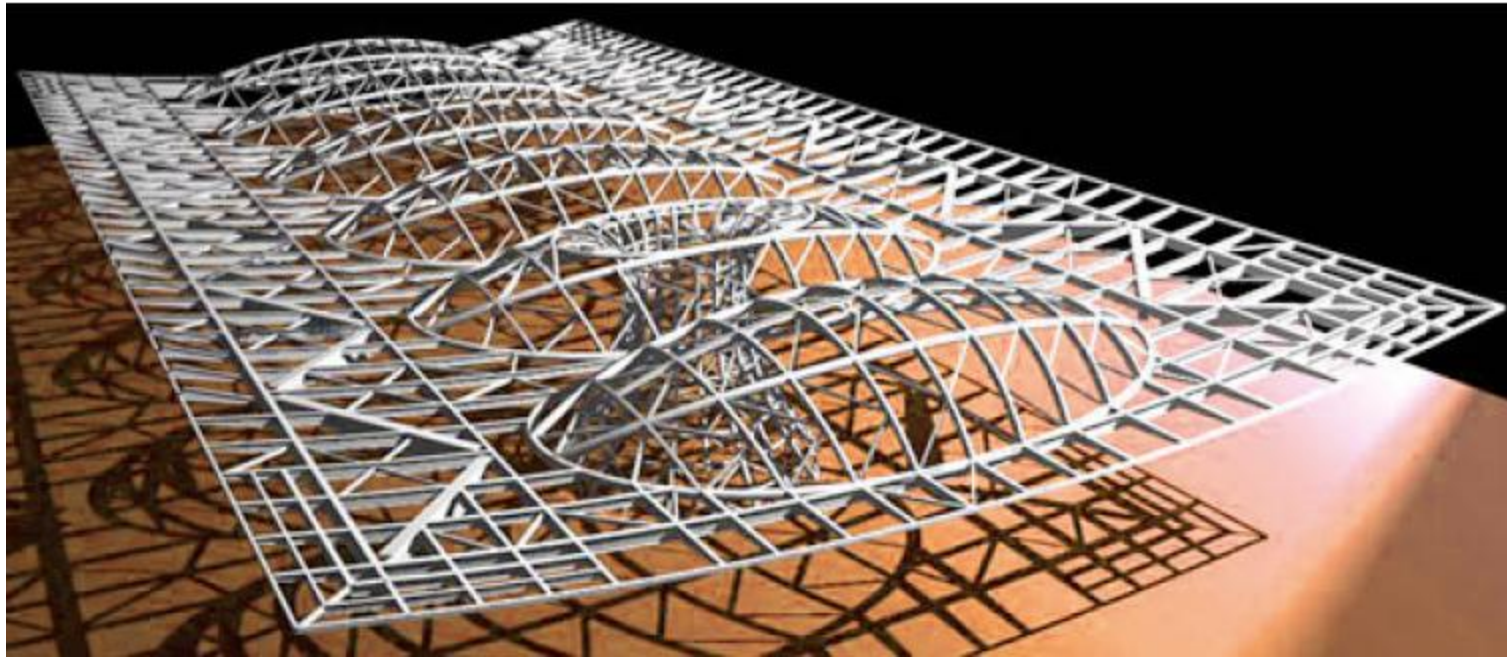
FOUNDATION



FOUNDATION

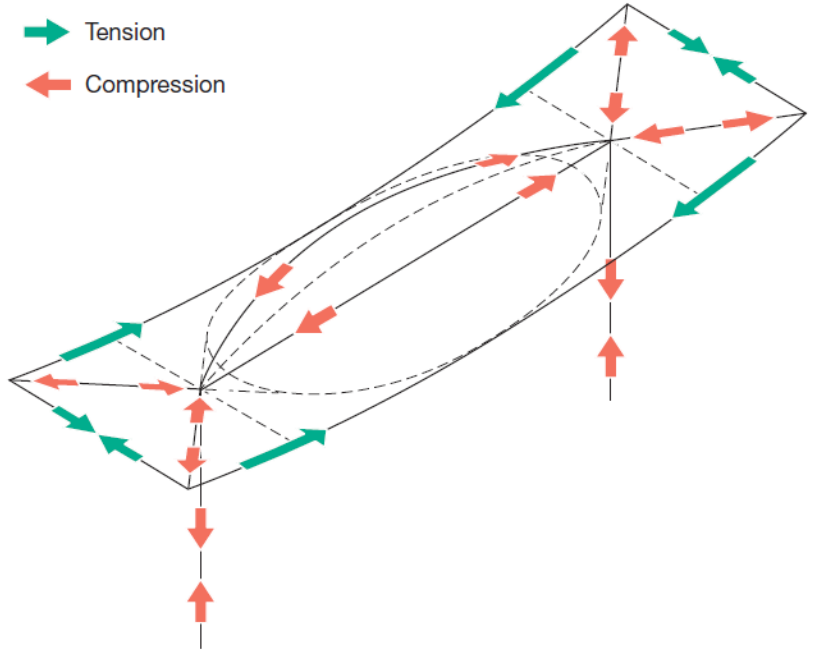
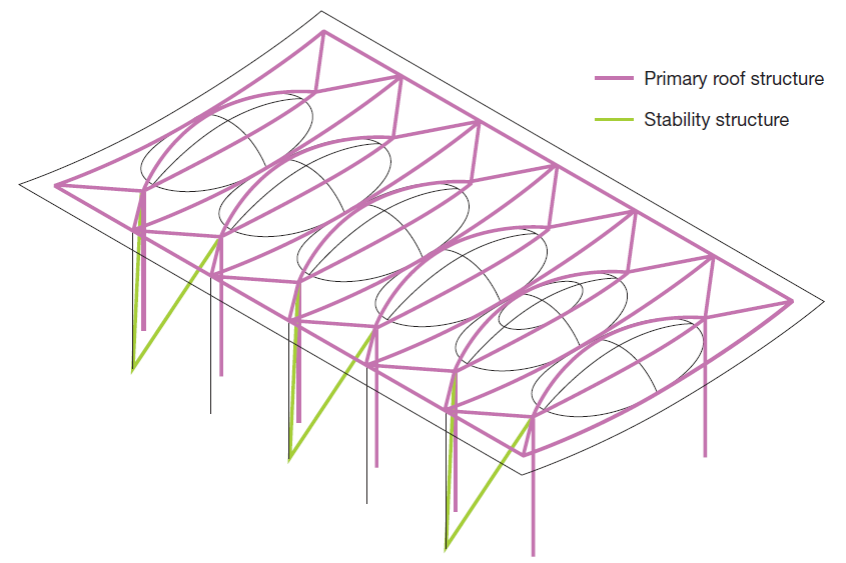
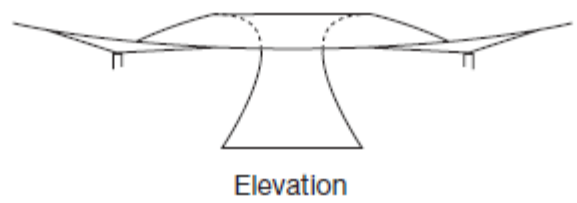
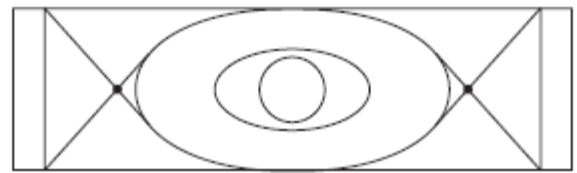
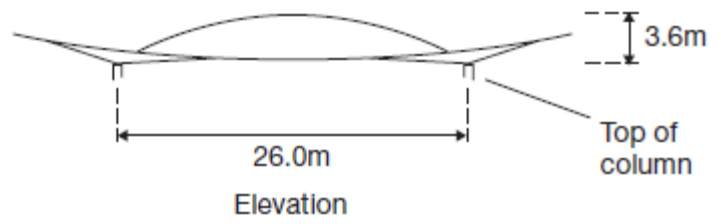
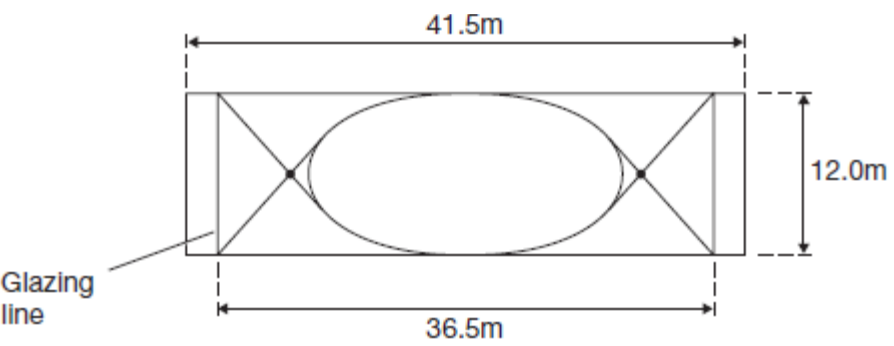


STRUCTURE



- DIAPHRAGM FOR LATERAL LOADS
- FRAMED RING BEAMS
 - 26M x 12M x 3.6M
- 4 CANTILEVERING BEAMS

(ROOF PLATE) **STRUCTURE**



(ROOF PLATE) **STRUCTURE**



(FUNNEL) STRUCTURE



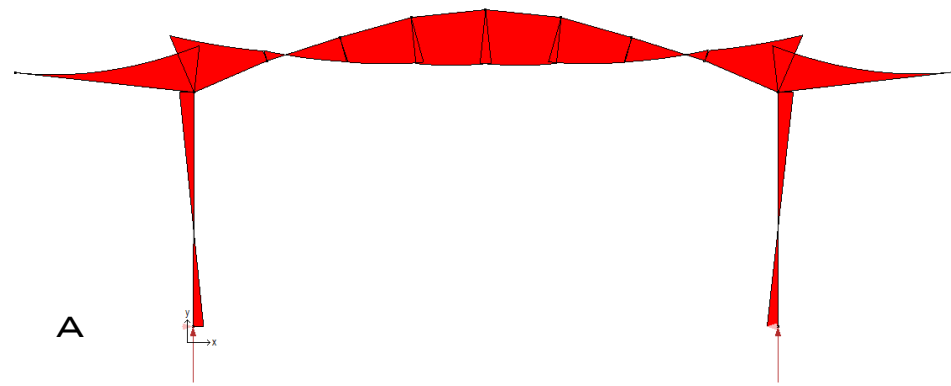
- TAPERED TO INCREASE MOMENT OF INERTIA
- HINGED CONNECTION AT COLUMN HEAD

(COLUMN) **STRUCTURE**

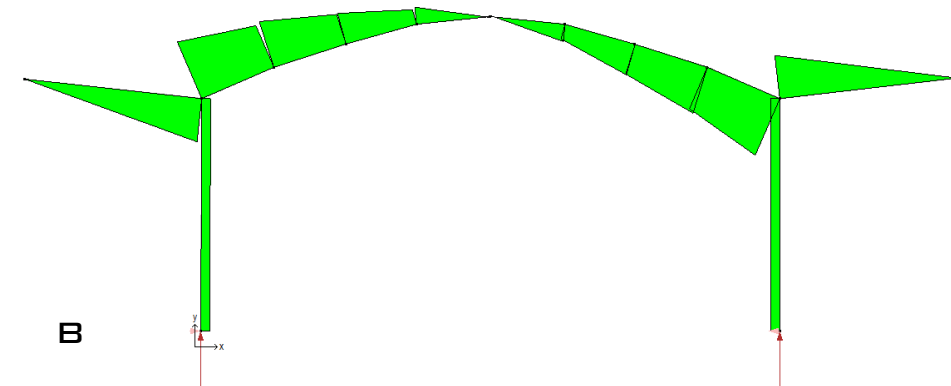


- TIE ROD BASE DETAIL
- TENSION TO REINFORCE ROOF

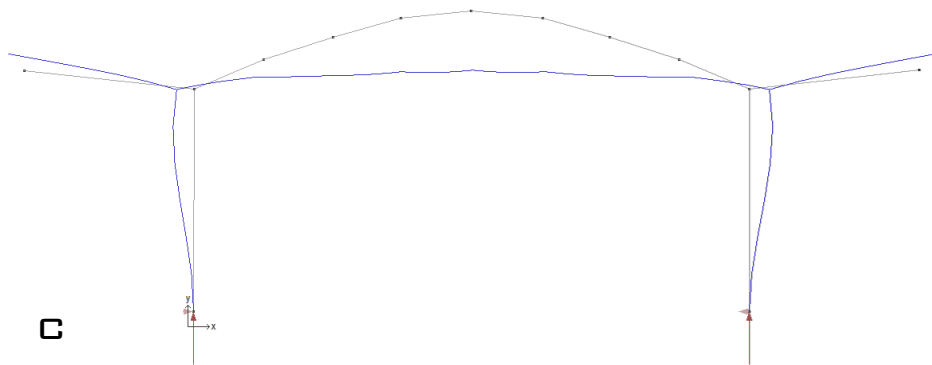
(CABLES) **STRUCTURE**



A

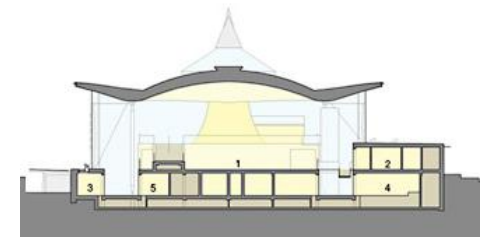


B

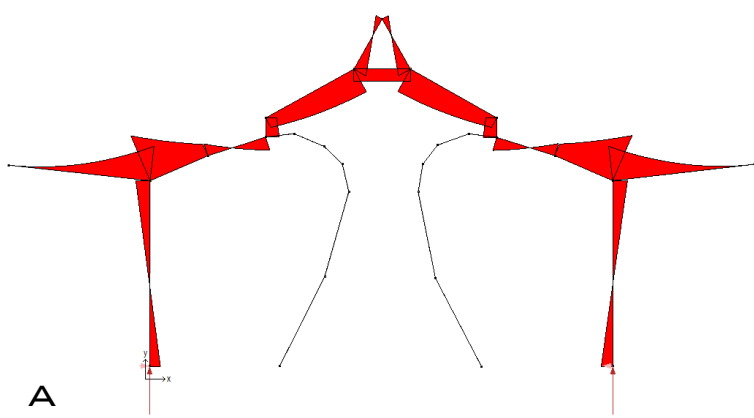


C

- A) MOMENT
- B) SHEAR
- C) DEFLECTION

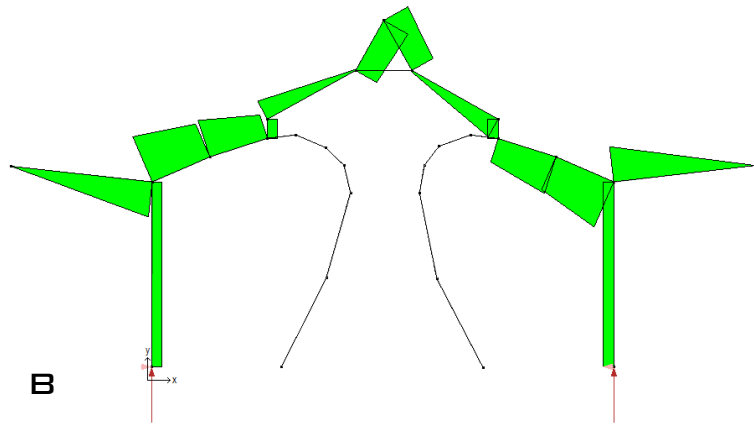


(MULTIFRAME ANALYSIS - DOME SECTION) **STRUCTURE**

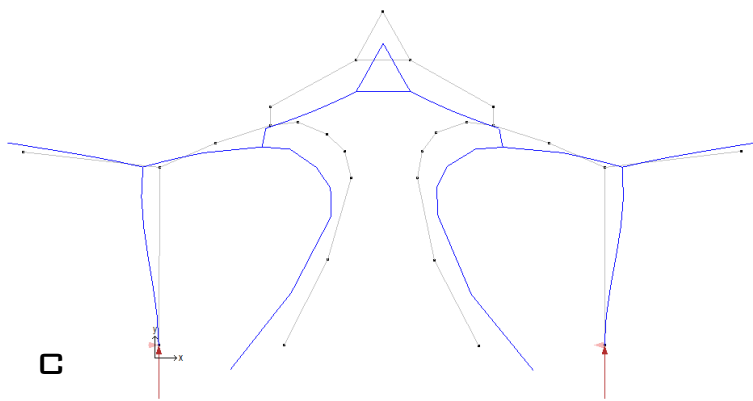


A

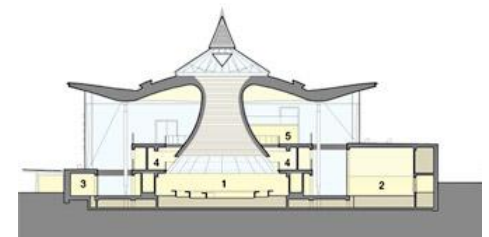
- A) MOMENT
- B) SHEAR
- C) DEFLECTION



B



C



(MULTIFRAME ANALYSIS - FUNNEL SECTION) **STRUCTURE**