

4.0 DESIGN APPROACH

4.1 FLOOR PLANS & SPATIAL ARRANGEMENT

Floor Plans

Responding to this broad range of consultations, the developed option presented over the following pages is judged to achieve the most effective balance between the existing building's significance and the new facilities essential requirement to enable its continued use, whilst also providing a positive and resonant symbol of the cultural vibrancy of Porthcawl.

The spatial adjacencies and brief were continually refined through consultation with BCBC and Awen Cultural Trust throughout RIBA Stage 3, whilst coordinating specialist input and requirements from the multi-disciplinary design team (see appendices for full design team information).

Accessibility Audit

An accessibility review has been undertaken by Jane Toplis Associates against the plans to develop an access strategy that provides access for all users. The scheme has been developed with regard to this strategy and any further comments at detail will be incorporated/resolved at technical design. Refer to the access audit appended to this report.

4.2 PROPOSED LOWER GROUND FLOOR

The Grand Pavilion sits on a site that retains public highways to the south, east and west, with vehicular access into the car park from the north-west. As such, the lower ground floor is partially retaining and lies below street level.

Car Park

Externally, the existing western car park is reconfigured to allow for six accessible parking spaces and five standard parking spaces, reserved for ambulant and wheelchair using staff and performers, and served by EV charging points. A soft landscaping strategy provides visual amenity to the staff offices and residential properties to the north, whilst in combination with wayfinding in the floor finish, demarcates the lower ground floor entrance.

Foyer & Heritage Interpretation

A new, open and generous foyer is created to link the east and west of the building, fundamentally connecting two new triangular stair cores that rise through all levels. Accessed off of the foyer is a passenger lift, generous WC provision, bar facilities, a redeveloped 'multi-use' space and the flat floor of the studio theatre to the east. Within the foyer, integral heritage interpretation is designed to narrate the social and architectural stories and identity of the building as part of the daily visitor experience.

Staff Offices

Located to the west, a flexible open plan staff office is provided alongside a dedicated meeting room, kitchenette and WC provision.

WCs

The primary publicly accessible WCs are located centrally, providing generous provision when combined with the allowance across all levels and including two accessible WCs.

Multi-Use Space

The central multi-use space, known locally as the 'Stage Door', is to be stripped of its dated late C20 finishes to reveal the original concrete structure beneath and to maximise available head height. The space is designed to be highly flexible and robust, with exposed services, a dedicated bar servery and storage provision facilitating community events, exhibitions or workshops, whilst a robust floor and wall finish allows the space to double as overflow dressing provision or a theatre workshop space when required.

Studio Theatre

A new, 145 seat studio theatre is accessible off of the central foyer, in close proximity to bar and WC facilities and providing a smaller, more intimate performance space. The studio floor is to be sprung timber which, combined with a retractable bleacher seating unit, provides great flexibility between rehearsals and flat floor events, in combination with cinema, live comedy and raked seating events.

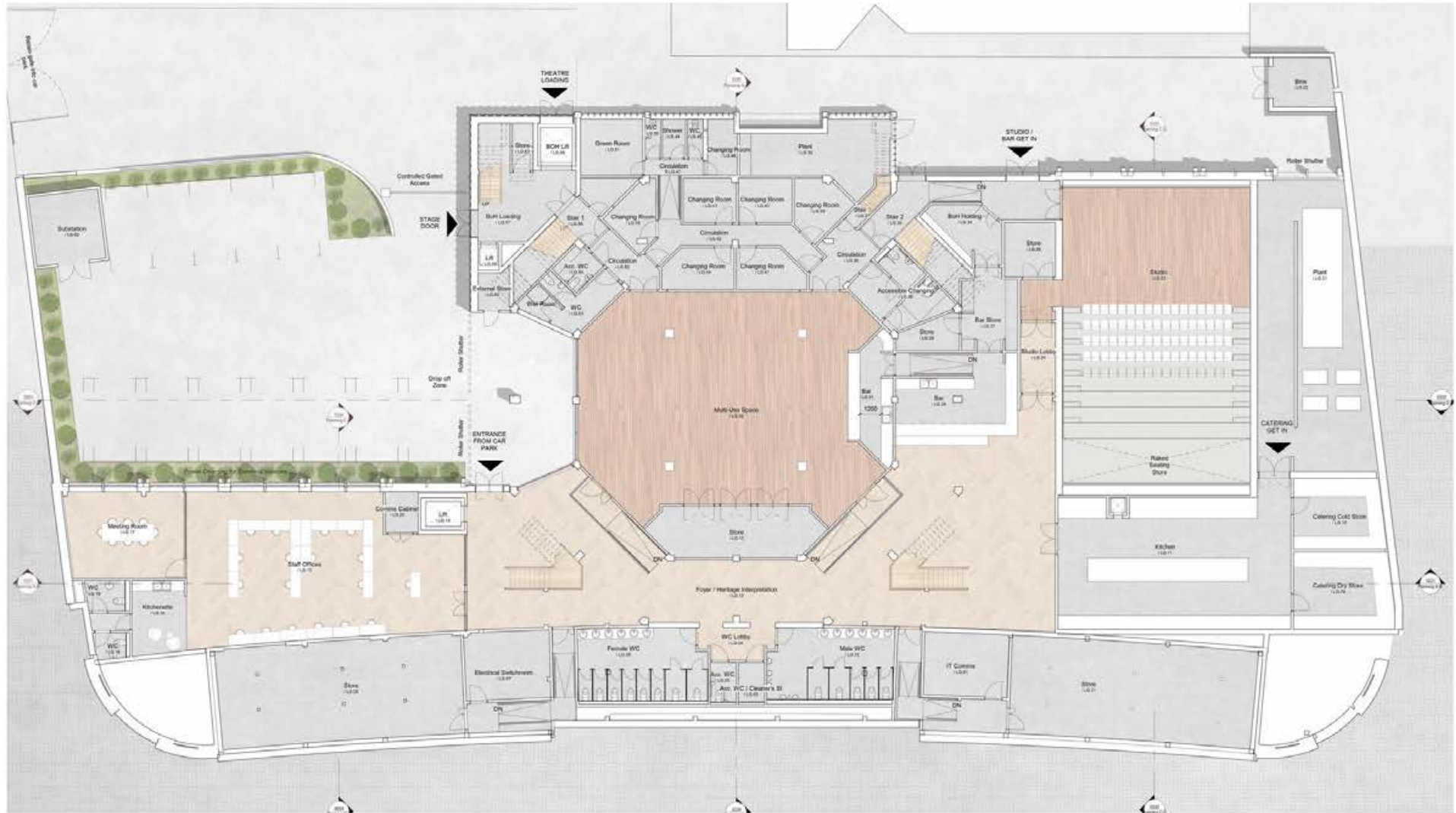
Commercial Kitchen

A generous commercial kitchen to the east ensures the catering capacity can meet the significantly increased demand of the of the redevelopment. From this position a dumb waiter rises through the floors to serve the upper level cafe and function provisions.

Back of House Loading

A modest extension to the north west corner of the building, adjacent to the existing dressing rooms, responds to the existing challenges of loading equipment and scenery up to stage level. Within this extension is a large loading lift and stair core that allows for transporting equipment directly to stage, whilst a platform lift provides performer access to stage from remodelled lower ground floor dressing rooms.

Proposed Lower Ground Floor Plan



4.3 PROPOSED GROUND FLOOR

The ground floor level is accessed directly off of the Esplanade at street level, which forms the primary access to the building.

Foyer & Heritage Interpretation

Responding to the confused existing entrance sequence, the proposals reinstate the central, original entrance as the primary entranceway, accessed by all from an integrated ramp from pavement level. The two triangular stair cores rise to ground floor from below, with all existing partitions and obstructions removed to provide a generous, open foyer and milling space as expected of a performance venue of such scale.

Multi-Use Community / Function Space

Located to the west, a self-contained multi-use space provides flexible provision for community events, exhibitions and workshops whilst also allowing for functions with spectacular seafront views. Designed with its own warming kitchen, kitchenette, bar, WCs and storage, the space can operate independently of other spaces, whilst opening out for capacity crowds to provide overflow milling, bar and WC provision.

Cafe

To the east, the existing cafe is considerably enhanced with a larger, flexible floor plan and a generous bar servery with supporting prep room and dumb waiter from below. The cafe benefits from striking south-facing sea views and, through a series of door openings in the front elevation, the offer can extend onto the extended pavement to the Esplanade.

Studio Theatre

The studio theatre is accessible from ground level via a fixed rear gallery. The gallery provides a technical operating position as well as four wheelchair parking spaces with companion seats, allowing wheelchair users to enjoy all events in the space with easy access to the foyer, WCs and Changing Place.

WCs and Changing Place

The WC provision is shared to the east and west, with a bank of WCs to the east of the auditorium, and additional provision in the multi-use community space. Splitting the provision is designed to reduce bottlenecks during capacity events, and the number of WCs combined with the lower ground floor and first floor provision, meets or exceeds design guidance. Fundamentally, a fully compliant Changing Places facility is planned with easy access from the central foyer.

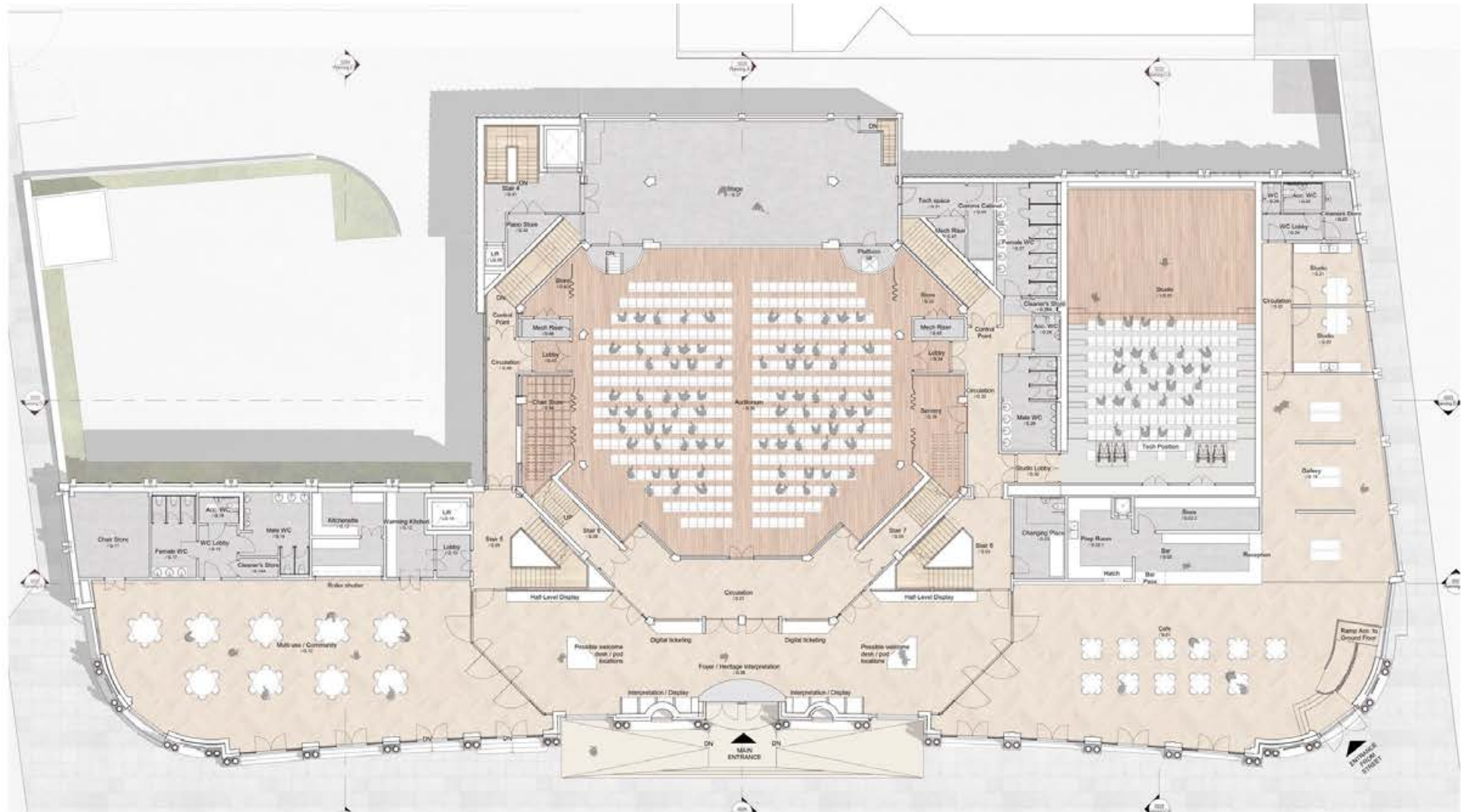
Gallery & Studios

Aligned with the Grand Pavilion's identity of arts and culture, a flexible gallery and two in-house studios are located to the east, with 'shop front' style window openings onto Mary St. The studio provision allows for resident artists or flexible lettable studio space, with the open plan gallery intended to display the works of local artists and makers.

Auditorium

The main auditorium is largely original, 1932 construction with very intact Art Deco features. The redevelopment looks to make minimal intervention only where necessary to improve operations or accessibility. To the east and west of the auditorium, a built-in servery kiosk, general storage and chair storage allows for servicing a range of events. Additionally, there is currently no wheelchair access to stage level, thus two remodelled projections to the front of stage provide a discrete platform lift and step access respectively.

Proposed Ground Floor Plan



4.4 PROPOSED FIRST FLOOR

Rooftop Pavilions

At first floor, the triangular stair cores and passenger lift rise to rooftop level over the eastern and western loggias, providing two fully accessible rooftop pavilions.

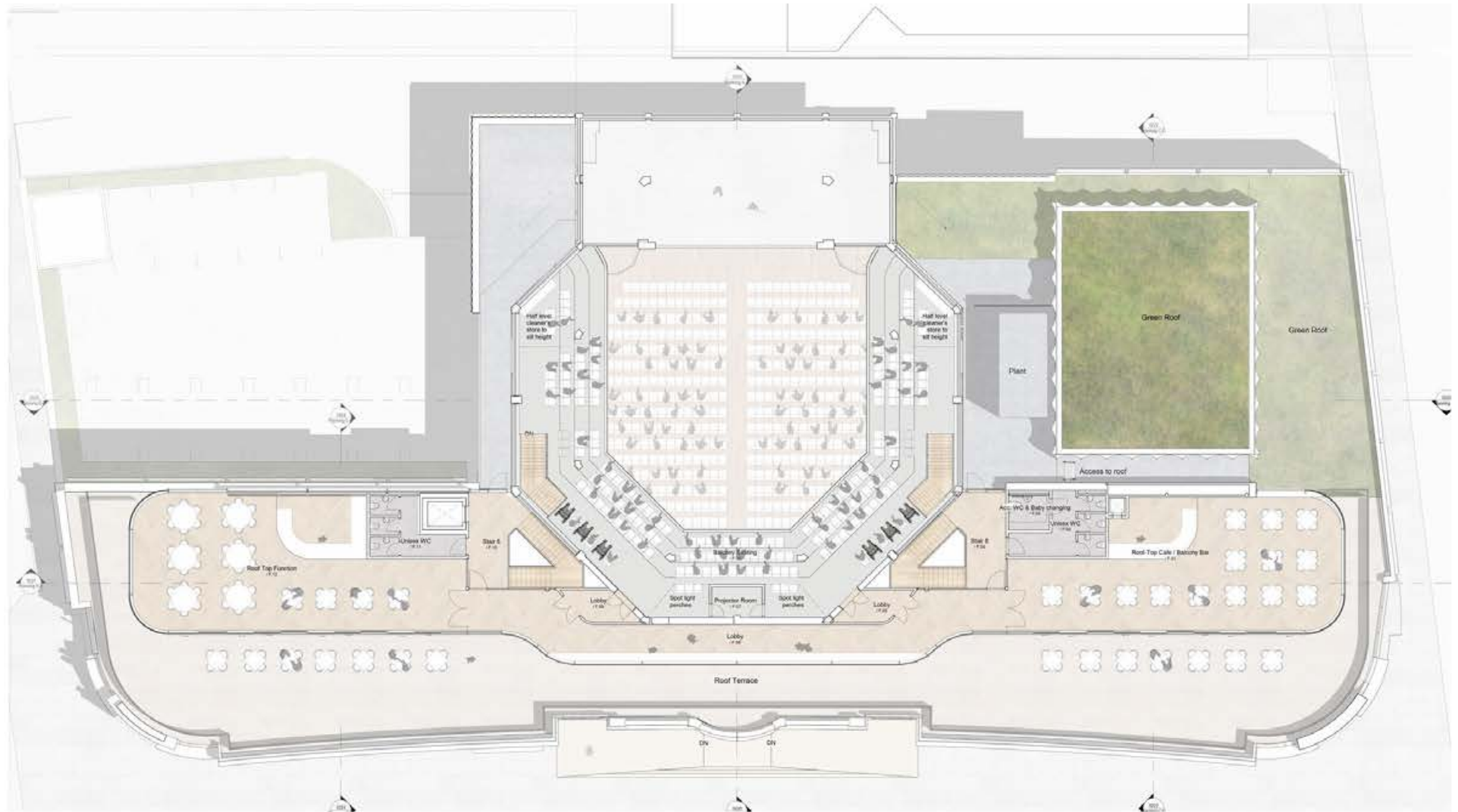
The pavilions benefit from spectacular south facing and elevated views directly over the Bristol Channel, with a roof top cafe and roof top function space served via independent bars, unisex and accessible WCs and breaking out through a highly glazed facade onto a rooftop terrace. A central, structural glass link to the front of the building connects the east and west, whilst providing an intermediary space for milling and interval drinks.

With these independent bars and WCs, balcony audiences can remain at balcony level during intervals, which relieves the WC and bar provision and ground and lower ground floor and, with passenger lift access the auditorium balcony becomes fully accesible for the first time, providing six wheelchair spaces with companion seats to a remodelled rear row.

Clerestory Windows

The stained glass clerestory windows around the auditorium at balcony level are to be repaired and reinstated into the space, providing natural light for appropriate events and discrete blackout systems when necessary.

Proposed First Floor Plan



4.5 PROPOSED ROOF PLAN

Green Roofs

A green roof is proposed to the majority of the eastern extension, providing visual amenity to onlooking residents and attenuation as part of a sustainable drainage strategy.

Plant

The new roofs over the eastern extension are carefully designed to conceal and acoustically shield rooftop plant in a recessed plant well between the auditorium and the raised studio.

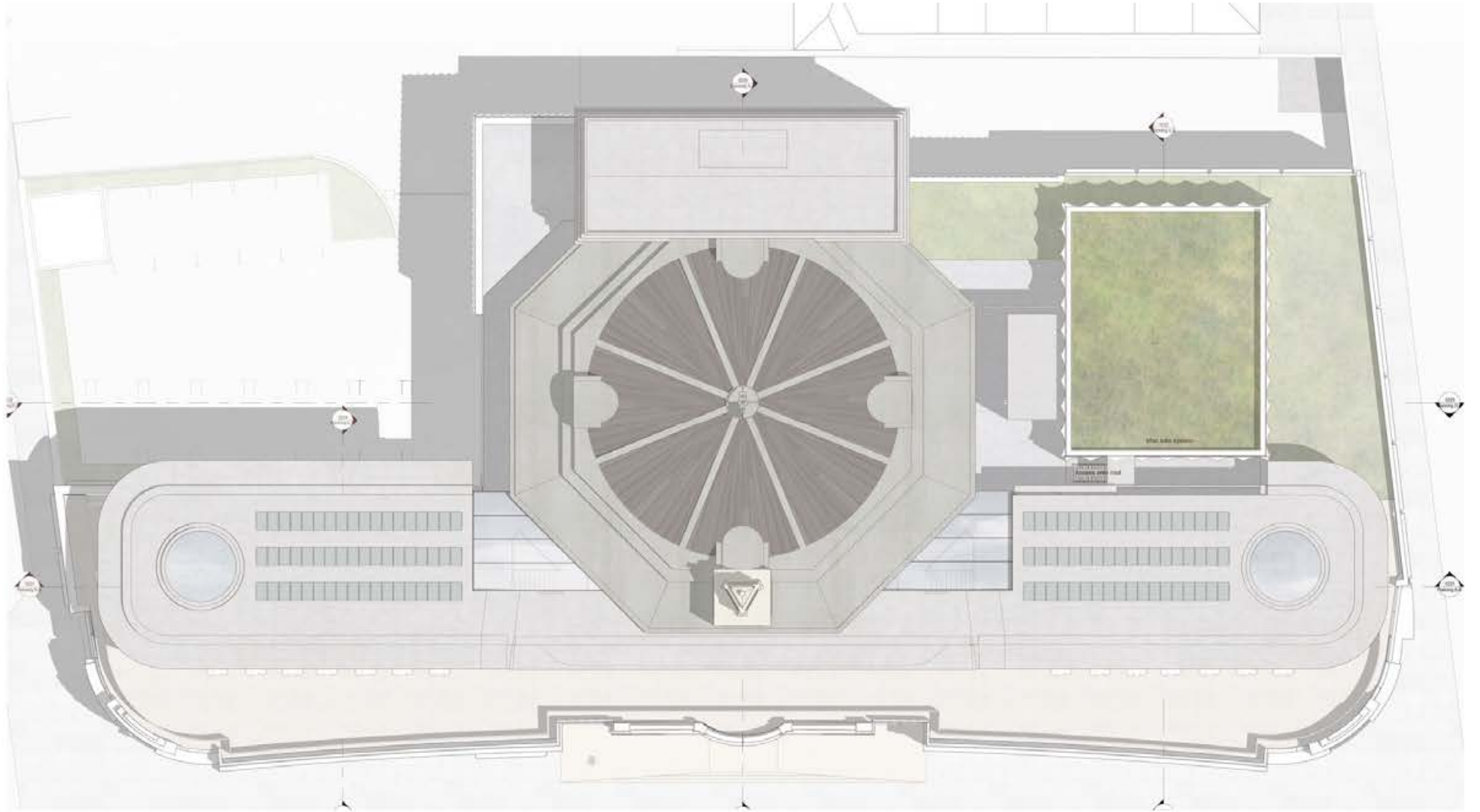
Dome Over-Roof

The existing concrete dome is exposed to the harsh seafront climate with a failing liquid membrane cover. The dome presents a considerable cold bridge and, during capacity events, hot air rising and meeting the underside of the cold dome is causing concerns over condensation and damage to original finishes. To protect the existing concrete and combat these issues, an insulated ribbed zinc over-roof is proposed, with details to be agreed with Cadw.

Rooftop Pavilions

Structural glass rooflights over the triangular stair cores allow toplight into the spaces below, whilst facilitating a minimal glazed link beneath the eaves of the existing dome. The roofs of the pavilions are proposed as metal coverings with flush fitting solar PVs to benefit from the site's due south orientation. A continuous projecting overhang wraps around the pavilions, providing solar shading to the highly glazed facades below, with a domed rooflight to the eastern and western edges referencing the hierarchy of the original Art Deco elevation below.

Proposed Roof Plan



4.6 ELEVATION DESIGN

The highly-significant Art Deco elevations of the original, 1932 ferro-crete Grand Pavilion are to be retained, repaired and redecorated in accordance with original design intent. Existing doors, screens and windows within these historic elevations are to be replaced with new, historically appropriate profiles. The existing dome will receive an insulated zinc over-roof in a ribbed configuration, retaining the hierarchy of the principal ribs that form the segmentation of the dome, with the original galleon weather vane refurbished and reinstated to its apex.

To the south, the set-back rooftop pavilions are read above the Art Deco principal facade beneath. The pavilions are highly glazed, with a principal structural grid creating bays that reference the proportion of the Art Deco bays beneath. A structural glass link connects both pavilions beneath the clocktower, with the roof profile dropping to sit below the eaves of the central dome, intended to retain its visual hierarchy and formal symmetry. A continuous roof overhang to the pavilions provides solar shading, with a lower level horizontal fin allowing for operable fanlights for natural ventilation. Domed glass rooflights to the east and west reference the symmetry of the arched book-ends in the Art Deco facade below.

To the east, the new elevation is separated from the historic building by a glazed bay, before pigmented pre-cast concrete bays provide shopfront style windows into the ground floor gallery and studio, creating a new street frontage and extension of Mary St. The studio, visible above the single storey gallery, is clad in scalloped pigmented pre-cast panels, the profile of the scallops derived from the segmental arches across the Grand Pavilion being translated into plan.

To the north, the redevelopment is directly overlooked by residents in an adjacent apartment block. To enhance the visual amenity, green roofs over these spaces are combined with bronze engraved screens designed to display artwork and stories of the building and the town. The pre-cast concrete elements are complimented with scalloped bronze zinc where the extension connects back to the Grand Pavilion, providing a visual separation.

To the west, the modest back of house extension to the north-west of the plan is clad in scalloped bronze zinc, with a structural glass connection to the western walkway revealing a long hidden reinforced concrete Union Jack balustrade.

Proposed South Elevation



Materials Key

- 01 - Existing render to be repaired / refurbished
- 02 - Existing clock tower to be refurbished
- 03 - Existing dome to have new standing seam metal roof & insulation
- 04 - Existing stained glass to be refurbished
- 05 - Existing weather vane to be repaired
- 06 - New glazing
- 07 - New glazed rooftop pavilion (PPC aluminium curtain walling)
- 08 - New rooftop pavilion canopy (Aluminium profile with timber soffit)
- 09 - New bronze fluted cladding
- 10 - New precast, pigmented concrete
- 11 - New digital illuminated advertisement boards
- 12 - New slope for accessibility to the main entrance
- 13 - New roller shutter for general security
- 14 - New photovoltaic panels
- 15 - New domed roof light
- 16 - New fluted concrete theatre pop-up
- 17 - New ceramic backed glazing
- 18 - New relief panels (to detailed design)

Proposed East Elevation



Materials Key

- 01 - Existing render to be repaired / refurbished
- 02 - Existing clock tower to be refurbished
- 03 - Existing dome to have new standing seam metal roof & insulation
- 04 - Existing stained glass to be refurbished
- 05 - Existing weather vane to be repaired
- 06 - New glazing
- 07 - New glazed rooftop pavilion (PPC aluminium curtain walling)
- 08 - New rooftop pavilion canopy (Aluminium profile with timber soffit)
- 09 - New bronze fluted cladding
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- 11 - New digital illuminated advertisement boards
- 12 - New slope for accessibility to the main entrance
- 13 - New roller shutter for general security
- 14 - New photovoltaic panels
- 15 - New domed roof light
- 16 - New fluted concrete theatre pop-up
- 17 - New ceramic backed glazing
- 18 - New relief panels (to detailed design)

Proposed North Elevation



- 01 - Existing render to be repaired / refurbished
- 02 - Existing clock tower to be refurbished
- 03 - Existing dome to have new standing seam metal roof & insulation
- 04 - Existing stained glass to be refurbished
- 05 - Existing weather vane to be repaired
- 06 - New glazing
- 07 - New glazed rooftop pavilion (PPC aluminium curtain walling)
- 08 - New rooftop pavilion canopy (Aluminium profile with timber soffit)
- 09 - New bronze fluted cladding
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- 13 - New roller shutter for general security
- 14 - New photovoltaic panels
- 15 - New domed roof light
- 16 - New fluted concrete theatre pop-up
- 17 - New ceramic backed glazing
- 18 - New relief panels (to detailed design)

Proposed West Elevation



Materials Key

- 01 - Existing render to be repaired / refurbished
- 02 - Existing clock tower to be refurbished
- 03 - Existing dome to have new standing seam metal roof & insulation
- 04 - Existing stained glass to be refurbished
- 05 - Existing weather vane to be repaired
- 06 - New glazing
- 07 - New glazed rooftop pavilion (PPC aluminium curtain walling)
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- 12 - New slope for accessibility to the main entrance
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- 15 - New domed roof light
- 16 - New fluted concrete theatre pop-up
- 17 - New ceramic backed glazing
- 18 - New relief panels (to detailed design)

Perspective Cutaway Section



Looking West from Esplanade



Looking South from Sea



Aerial Cutaway Perspective

