CORE CAPITAL COMPONENTS
FOR FURTHER INFORMATION ON THIS SECTION, REFER TO THESE GCCP MASTERPLAN SUPPORTING DOCUMENTS:
Landscape Report MP-TOP-0100; Landscape Audiovisual Presentation MP-TOPP-0100
VISION

THE ARTSCAPE IS ENVISAGED AS A CURATED LANDSCAPE IN BOTH ARTISTIC AND BOTANICAL TERMS: AN OUTDOOR GALLERY AND THEATRE OPEN TO THE SKIES – AND THE WORLD. IT WILL BE DEFINED BY FEATURES AND PLANTING THAT CREATE AN OASIS OF AMAZING BEAUTY AND INTERFACE SEAMLESSLY WITH THE NEW ARTS MUSEUM AND PERFORMING ARTS CENTRE. IT WILL BE ACTIVATED THROUGH A RICH AND EVER-CHANGING ARTISTIC PROGRAM AND INHABITABLE IN COUNTLESS WAYS FROM PRIVATE PICNICS, CONTEMPLATIVE ART INSTALLATIONS AND CITIZENSHIP CEREMONIES, TO PUBLIC PERFORMANCES LIVE OR SIMULCAST FROM ANYWHERE IN THE WORLD, DIGITAL DESIGN TOURNAMENTS, MOONLIGHT CINEMA AND CROWDED MARKETS AND FESTIVALS.

DESIGN RESPONSE

Change and unpredictability is the primary generator of the design strategy for the Artscape. The Artscape is ordered by a modular system of voronoi cells over the entire site. This frame is able to adapt to local contingent conditions and at the same time produces a highly differentiated structure translating and materialising in a myriad of ways. The generative landscape connects indoor and outdoor spaces and activities. In spite of the modularity of the system, the generated spaces are infinitely changeable and animated.
LAYOUT
The voronoi cells provide an ideal framework a design strategy for the great outdoors. It maximises the Artscape creating a wide, open public space and a unique attraction for residents and visitors.

Softscape and hardscape alternate offering a wide collection of different landscapes all over the site. These enhance the current conditions while fostering new opportunities, expanding and improving the public realm.

The existing lake becomes a new waterscape, embraced with a new beach and enriched with a series of pools – from the more natural (retention area, water garden, lagoon) to recreational water areas that appear additional qualities and allow for new uses.

More playscapes animate the site. The eastern end of the lake accommodates a water playground of waterslides and swings next to the shallow, enclosed children’s pool. To the south, near the life-guard pavilion, a jumping platform and climbing wall is perfect for older kids to launch into the deeper water. From here, lap swimmers can dive into the 100m-plus swimming lane and emerge at the other end at the beach shaded by gigantic permanent beach umbrellas. A walk along the wide sand leads to the beach volleyball court beside another playground with conveniently located toilets and change rooms nearby.

West of the Performing Arts Centre near Bundall Road, a skatepark, circular outdoor table tennis table, and dynamic stepped landscape create a wide area where children as well as youngsters can play and exercise. Younger children have more space to play in this area equipped with slides, swings and rockers. The different Artscape playgrounds offer a huge variety of activities suitable to all ages.

To the north of the Performing Arts Centre, a wide band of green space tapers between the Performing Arts Centre service road and the riverbank. The sandy cove here is for informal landing of small vessels. Boardwalks, timber platforms and large treed grassy areas encourage more passive enjoyment of the park – a pleasant area to walk through, sit in, or picnic at.

Along the northern edge of the lake, wilder fragments of nature integrate with the existing vegetation. Here the landscape collection – a botanical showcase – is inlaid inside the voronoi structure, preserving and reinforcing the existing ecological value of the site. A dense green frame encloses the central, more urban core of the site. The unique gardens that define this frame present educational opportunities.

Subtropical species, sand dunes and grasslands evoke the rich variety of Australian landscapes, like “wonder rooms” producing a new outstanding environment.

More open air areas are planned to accommodate the art gardens. Some of them are conceived of as land art pieces, where the garden itself becomes art. Others are rather thought of as “boxes” that implement the art museum’s programme facilitating outdoor exhibitions. The art gardens can also have a pedagogical framework, as they can offer didactic programmes with the opportunity to involve local educational institutions.

Like a glue linking the different cells of the structure to one another and to the surroundings, the path system embraces the different gardens and allows for people to inhabit them and explore them up close.

It is conceived of as part of the same voronoi structure and changes from wider concrete walkways (filings inside the cellular mesh), to smaller paths (bordering the cells) made out of natural stone blending into the green surface, transforming into elevated wood platforms and boardwalks penetrating the northern wild gardens and offering favoured viewpoints along the way.

The new Friendship Bridge strengthens the connectivity between the precinct and Chevron Island, and creates a unique public space suspended over the water. Inspired by the history of the city itself, the bridge truly connects the land, the rivers and the ocean.

A further outdoor extension of the Art Tower is the outdoor Stage and Lawn. It has a prime location, far apart from the noisy roadways yet occupying the central core of the site. An iconic splash-shaped pavilion in the Artscape set in front of a gently raked audience Lawn, it accommodates performances and events – large or small, ticketed or free. The Lawn has capacity for up to 5,000, with additional spill-over to the Great Terrace. It is equally appropriate for small, community events. For most of the year when it is not hosting a performance, the Stage and Lawn contribute to the amenity of the Artscape; the Stage as a venue with river views for the public to hire, and the Lawn as grassed and shaded parkland perfect for markets, picnics or throwing a frisbee.

The Artscape is addressed in further detail in the Landscape Report.
9.1.1/GREAT TERRACE

The Great Terrace is the literal epicentre of the Cultural Precinct. It is a large-scale outdoor shaded piazza framed and addressed by both the Performing Arts Centre and the Art Tower. The Great Terrace aims to be a new twenty-first century urban hub for the Gold Coast and hinterland.

Visitors enter from the west, either side of the Council Chambers, up from the central carpark - or from the basement carpark directly beneath the Terrace itself - to a plaza 70m in diameter with a stunning vista east to the towers of Surfers Paradise across the Evandale Lake and Nerang River.

Like a sampler of the “Best on Offer”, the Great Terrace is a seeded environment incorporating the hinterland botanic environment, art installations, shaded walkways and focused recreation areas, food stalls, pop-up kiosks and cafés...all under an exciting canopy of living umbrellas, providing an iconic setting for casual activities and large civic gatherings both day and night.

Here the visitor and tourist emerge into the heart of the precinct, at the high point of the Artscape and between the Performing Arts Centre and the Art Tower. And here, with the Lawn below, and the distinctive high-rise profile of the Gold Coast as an ever-present and ever-changing backdrop, we may begin to wonder if “we have now finally arrived”.

This text is a description of the Great Terrace in the Cultural Precinct, detailing its location, purpose, and features. It mentions the entrance from various points, the size and layout of the plaza, and the variety of amenities available, including art installations, shaded walkways, food stalls, and cafes. The text concludes with a contemplation of the experience of arriving at this central location, set against the backdrop of the Gold Coast.
9.1.2 / THE LAWN & STAGE

The eastern edge of the Great Terrace opens on to a wide treed lawn that flows down the hill towards the views of the Artscape, the lake, the Stage and Surfers Paradise beyond.

The Stage is an iconic multipurpose structure that is both performance stage and function venue. The Stage is a sculptural element that complements the Artscape when not in use and is the focus of the Lawn when it is. The Stage comprises a 200m² stage facing westward towards the Lawn and Great Terrace, wings and back of house facilities and a function room/extended stage face the river to the east. The Stage is envisioned with operable walls so that it can be completely closed when not in use or utilised as a larger enclosed function space including the stage area.

Located below stage level are two dressing rooms, a large shared green room/group dressing room and data/bio rooms. Stair and large scale lift access connects this level to stage level. There is potential for the stage structure to be designed so that elements can be removable with the potential to incorporate a sub-stage trap for exceptional access requirements – issues to be addressed in the detailed design phase. The Stage is designed to accommodate community events and performances but is large enough to accommodate the Queensland Symphony Orchestra noting that this would require additional facilities to be bumped in.

The Lawn surrounding the Stage is a series of gently sloping veronoi terraces and concert meadows – great for both formal programmed use and fully integrated into the cellular structure of the Artscape – looking good during active and passive times.

The Lawn has capacity for ticketed events of 3,500 people. In a non-ticketed event the Lawn has capacity for 5,000 plus people who may enjoy the event from the Great Terrace or surrounding Artscape.

Ticketed events will require bump in of fencing, barriers, and depending on the scale of event, equipment and amenities. The Lawn and Stage are proposed to cater for seated events of up to 850 people with very little bump in. Loose seats are proposed to be stored in the Art Tower basement. Amenities are via those adjacent to the lake playground and in the Riverside Gallery which has capacity for a separate out of hours access corridor to its toilets. In most circumstances it is envisioned that the café would be trading during events. In later stages of project delivery, toilets would be provided in the Art Tower, or as part of the hotel development.

Bump in at the Stage is proposed on the hardstand areas to the south and east of the stage. As an in-the-round venue, this set-up process will be visible to precinct users. Events requiring bump in will likely be limited to something in the order of 12 per year.

The success of the Stage as a functional performance space is reliant on quality acoustics, together with services and technologies to host large scale events, including cinema and live performances. A dedicated distributed sound system is proposed comprising of stage speakers and pole mounted speakers in the audience area. This reduces the
sound spill and allows the coverage to be adjusted to the crowd size in attendance. The optimum stage location and orientation is to place it at the bottom of the lawn between the Great Terrace and the view towards Surfers Paradise, thus the Stage faces west towards the Great Terrace. For short periods in the late afternoon this orientation means performers will be facing the sunset. The detailed design of the Stage must mitigate this issue with retractable blinds or the like.

Storage additional to area allocated in the basement of the Stage is accommodated in the Riverside Building in the first instance, and in the Art Tower basement once complete.
9.1.3/EVANDALE LAKE

CURRENT USE
Evandale Lake is a popular swimming location for families, lap swimming, and the Nippers and Surf Clubs as an alternative to ocean training. It is deep with steep and narrow beaches.

FUTURE USE
The proposed lake is dramatically transformed with generous beaches to the west, figured boardwalks to the north and east with water sports, water gardens and water play, and dense and varied forests to the north. The revised lake provides a dense fabric of activity for all ages – water bombs from the jumping platform, learning to swim at the children’s pool, sun bathing and volleyball on the western beach.

REVETMENT WALLS
The northern shore of the lake is bordered with paved paths and revetment walls that bring pedestrians and the landscape collection to the water’s edge.

BOARDWALKS
Boardwalks provide an intimate and exciting interaction with the lake. Generated by the voronoi, the boardwalks create contained pools for play, water sports, water gardens and water art.

BEACH & BEACH PROFILE
The beach is re-profiled to create a sandy fall into the water at 1:10 or gentler. The beach is widened to up to 15m with further landscaping and hardscape leading up to the food and beverage retail in the Performing Arts Centre. The beach is bounded by the beach volleyball court and viewing area at the south and the landing/跳水台 to the north.

ACCESS
Universal access is provided to all areas of the lake with disabled access to the beach directly from the lake side promenade.

WATER QUALITY & CLARITY
The Masterplan proposes to reduce the depth of the lake from approximately 8 metres to approximately 3-4 metres. This will increase the turnover of water in the lake that occurs from tidal flushing. It is also expected that the redevelopment of the site will encourage more frequent use by recreational swimmers. Whilst water quality in the lake is currently generally good with few pollutant sources, factors which may increase the risk to swimmers include increased bather density, and rate of dilution of the water. If required, there is an opportunity to increase the extent of tidal flushing with the Nerang River as part of redevelopment of the lake. It is recommended that an updated sanitary inspection is conducted, and that an assumed increase in recreational swimmers is applied. This would help to determine whether existing tidal exchange to the lake is sufficient or if additional flushing with the Nerang River would be required to maintain water quality within safe standards for recreational use.

LAP SWIMMING
Lap swimming is maintained with a 110m lane diagonally across the lake from the landing in the north-west to the water play in the south.

FOR FURTHER INFORMATION ON THIS SECTION, REFER TO THESE GCCP MASTERPLAN SUPPORTING DOCUMENTS:
9.14/FRIENDSHIP BRIDGE & INTEGRATION

The Friendship Bridge is a proposed pedestrian and cycle bridge spanning the Nerang River between Stanhill Drive and Evandale.

The proposed bridge has a clear width of 5.7m. It is graded to provide functional universal access while achieving sufficient height to clear the navigational channel. The Stanhill Drive approach is relatively straight so as to minimise impacts on neighbours and minimise the required land acquisition. The grades of this approach are 1:20 up to the navigational channel. The Evandale approach is a shallower grade of 1:34 achieved through a curved ramp. The bridge provides areas to pause and take in views at the apex and curved entry ramp. The bridge design proposes a roof structure to provide shade and weather protection.

Our concept for the new Friendship Bridge linking Chevron Island further explores the history of the City itself.

Inspired by the motto of the Gold Coast Crest, “Terra Fluminum Et Oceani”, the bridge truly connects the land, the rivers and the ocean.

The Gold Coast is primarily a site of escape and pilgrimage. Like all holiday resorts, but especially that of the Gold Coast with its hedonistic reputation, it is a place where the normal strictures on everyday life are relaxed. Life is placed in parenthesis at the Gold Coast.

Gold Coast Urban Heritage & Character Study

For further information on this section, refer to these GCCP Masterplan supporting documents: Coastal Structures Report MP-ARCS-0100; Transport Report MP-ARTR-0100; Friendship Bridge Engineering Report MP-ARBR-0100
NAVIGATIONAL CHANNEL
The navigational channel clearance dimensions have been matched to the western Chevron Island Bridge. The channel is 30m wide with central clearance of RL5.70m tapering down to a clearance of RL4.85m at the landings.

DDA COMPLIANCE
The bridge design is predicated on providing functional universal access. It includes 1:20 grades from the Stanhill Drive approach, and 1:34 grades from the Evandale approach. Australian Standard AS1428.1 2009 Design for access and mobility – General requirements for access – New Building Work relates to buildings but is an appropriate standard to adopt for public spaces. Full compliance with AS1428.1 2009 stipulates landings at 15m intervals for the 1:20 walkway and no requirement for landings for the 1:34 walkway. The landings on the Stanhill Drive approach require the bridge to extend into the Stanhill Drive road reserve and necessitate the closure of the southern lane. Alternatives exist to keep the bridge clear of the Stanhill Drive road reserve through either introducing handrails to offset steeper gradients, using breakout areas in lieu of landings, or a combination of both.

IMPACTS ON STANHILL DRIVE
The base design for full DDA code compliance requires the bridge to extend into the Stanhill Drive road reserve and necessitates the closure of the southern lane. Stanhill Drive is currently one way with the northern lane currently closed at the Mawarra Drive intersection. This bridge proposal would effectively flip the current arrangement although the lane direction would be maintained. There may be further road reserve upgrades and works to Mawarra Drive to improve pedestrian connectivity to the new bridge which have not been investigated in detail at this stage of the proposal.

PROPERTY ACQUISITION
The bridge requires acquisition of one property on Stanhill Drive. The design team investigated alternative ramping options that would require two properties however the benefits of these was deemed negligible relative to the cost.
9.1.5/ RIVERFRONTS

The Evandale site has approximately 1,000 linear metres of river frontage which are variously treated in the Masterplan with boardwalks, revetments, mangroves and beaches.

REVETMENTS AND PROMENADE

Generally, the fast flowing currents to the south-eastern river frontage are protected with hard defences such as revetments. Architecturally this frontage is treated with a semi-detached paved promenade that is suspended over the revetment.

BOARDWALKS

The northern river frontage has slower currents and in these areas the landscape engages with the river more naturally with mangroves and beaches. Boardwalks provide pedestrian access in these locations to protect these more delicate landscapes and allow interaction with the river edge in safe and accessible way.

FOR FURTHER INFORMATION ON THIS SECTION, REFER TO THESE GCCP MASTERPLAN SUPPORTING DOCUMENTS:
Landscape Report MP-TOP-0100; Landscape Audiovisual Presentation MP-TOPP-0100; Coastal Structures Report MP-ARCS-0100
WHARVES & JETTIES

Jetties are located in places along the waterfront and elements of the boardwalk extend over the river to provide visitors with an exciting water experience and opportunities for fishing. An existing jetty is retained on the northern bank which will allow casual mooring of boats. There is a ferry terminal on the south-eastern bank which will be a key point of tourist arrival.

BEACHES

Beaches are located on the northern river frontage in areas where the current is slower and a beach structure is appropriate.

FISH TRAPS

South-east Queensland indigenous people used traps to catch fish utilising the tides. Physically these are semi-submerged rocks arranged in enclosures to catch the fish at high tide, leaving them stranded at low tide. The scheme makes reference to this significant cultural practice on the northern river edge of the peninsula.
9.1.6 / GARDENS

The Artscape gardens are informed by two macro zones:
1) the peninsula where existing levels are maintained and flood events are possible, and 2) the greater site typically above flood level.

Within the macro zones the landscape character is realised through definitively thematic areas organised by spatial typology and activity and expressed by either material, vegetative, or motif differentiation. These are largely linear and lead visitors through the landscape. Within these thematic areas are a number of specialist gardens – Welcome Gardens, Art Gardens and Water Gardens.

The Landscape Report contains detailed information regarding the gardens and Artscape.

FLORA & SOFTSCAPE

The Artscape draws on a variety of flora with natural areas such as the landscape collection and mangroves to the more exotic Welcome Gardens and commercial zones. Topotek1 have worked closely with south-east Queensland landscape architects, CUSP to generate a planting species list that is both exciting and diverse but also durable and sustainable.

PAVING & HARDSCAPE

The Artscape contains a variety of paving and hardscape surfaces that develop the voronoi concept. The scale and texture of the paving responds to the hierarchy of the path system with secondary and tertiary paths dissolving into smaller stone pavers.

PROPAGATION & PROCUREMENT

A variety of procurement options exist. The open market can supply a limited range of commercially viable stock. Contract growing is generally reliable and cost effective and City of Gold Coast also has capacity to contribute to growing certain species which will reduce landscape costs. Significant lead times need to be considered to achieve suitably sized stock and allow a more mature landscape result from day one.

IRRIGATION

Irrigation is currently proposed to include recycled treated water as part of the sustainability initiatives.

TREES RETAINED

As an integral part of the planting concept, the maximum number of existing trees have been maintained to enhance the immediate result of a lush park.

FOR FURTHER INFORMATION ON THIS SECTION, REFER TO THESE GCCP MASTERPLAN SUPPORTING DOCUMENTS:
Landscape Report MP-TOP-0100; Landscape Audiovisual Presentation MP-TOPP-0100; Botanical Overlay 2014 MP-CBBO-0100; Ecological Assessment MP-CBEA-0100
The Artscape includes a variety of pavilions which provide places to pause, picnic, barbecue, obtain information, buy tickets, buy food, talk to life guards, contemplate life, or get married.

**BARBECUES AND PICNICS**

Barbecue facilities are located within the Artscape in proximity to the various river frontages and beach areas. Picnics are encouraged through the Artscape. The Stage Lawn, flanked by cultural buildings with a gentle slope down to the Stage and river and spectacular views of the city will prove a popular location for picnics, but equally the Artscape provides numerous garden rooms and open spaces that provide fantastic picnic opportunities.

**KIOSKS**

Kiosks are located at the Great Terrace and the ferry terminal to provide information, ticketing, and retail as place activators.

**POP UP FOOD & BEVERAGE**

The Artscape will be serviced so that pop up food and beverage can occur throughout as need or opportunity dictates. The Masterplan formally identifies the Stage and the Bridge as locations where pop up food and beverage should be encouraged.

**CHAPEL**

The existing heritage listed chapel is being relocated to the southern riverbank.

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**FOR FURTHER INFORMATION ON THIS SECTION, REFER TO THESE GCCP MASTERPLAN SUPPORTING DOCUMENTS:**

Landscape Report MP-TDP-0100; Landscape Audiovisual Presentation MP-TDP-0100
9.1.8/ ARRIVAL SPACES

Arrival to the site from Bundall Road is framed by detailed Welcome Gardens which lead visitors into the site through terraced plazas with water features to the Great Terrace. Pedestrians and cyclists arriving from the bridge enjoy a slow curved decent into landscape collection and visitors arriving by ferry enter through the bustle of the riverside retail, again directed by the Welcome Gardens to the Performing Arts Centre and then up to the Great Terrace.

Paved surfaces including commercial zones, plazas, roads and small meandering paths work within the voronoi system to connect and form an intricate circulation system and public space network.

9.1.9/ OUTDOOR FURNITURE

The outdoor furniture will be plentiful, delightful and durable. Conceptually the furniture above flood level is heavy, grounded and from materials such as concrete and stone. The furniture below flood level is lightweight in material and form, allowed to float in place in case of flood.

FOR FURTHER INFORMATION ON THIS SECTION, REFER TO THESE GCCP MASTERPLAN SUPPORTING DOCUMENTS:
Landscape Report MP-TOP-0100; Landscape Audiovisual Presentation MP-TOPP-0100
9.1.10 / PUBLIC ART STRATEGY

Including public art across the Gold Coast Cultural Precinct site is an important and conspicuous way to activate and enliven the site. Significant works of high visual impact will delight and intrigue visitors, compelling them to engage with the site and encouraging further exploration and engagement. These installations will become beacons and meeting places: ‘meet me at the purple bubbles’. The intended distribution of artworks across the site places larger works with greater visual impact at points of entry to the site and points of interest.

Smaller open-air artworks will be more modest and play on the idea of happenstance, visitors might stumble upon a smaller intervention in the Artscape, sparking joy and surprise or triggering deeper contemplation. Some of these might take the form of arboreal or land-art, changing over time or existing only temporarily.

Curatorially, the Artscape could include existing collection work (if not in ACGC’s collection, then in allied collections), as well as works acquired through purchase or commission. There should be a clear strategy and curatorial approach to acquisition ensuring a coherent expression across the site.

For further information on this section, refer to these GCCP Masterplan Supporting Documents:
Exhibition Design Report MP-CMD-0100
Landscape Report MP-TOP-0100
Landscape Audiovisual Presentation MP-TOPPF-0100
9.2/ NEW ARTS MUSEUM

VISION
THE COUNCIL VISION IS AMBITIOUS AND JUSTIFIED BY STATED NEED AND SUBSTANTIAL EXISTING CONTENT.
THE NEW ARTS MUSEUM IS ENVISAGED AS THE MUST-SEE DESTINATION FOR RESIDENTS AND VISITORS WANTING TO UNDERSTAND AND CONNECT WITH THE ESSENCE OF THE GOLD COAST. IT PLAYS ITS ROLE AS A PLATFORM TO SHARE HOMEGROWN TALENT, BUT ALSO TO REFLECT OUR LOCAL COLLECTIVE MEMORY THROUGH ARCHIVING AND HERITAGE CONSERVATION OF THE CONTEMPORARY CITY. WITH INCUBATOR AND STUDIO SPACES, IT WILL ALSO BE A PLACE FOR TRAINING, MENTORING, MAKING AND MARKETING OF ARTS, CRAFTS, DESIGN AND OTHER CREATIVE PRACTICES. IT WILL PRESENT LIVELY AND ENGAGING EXHIBITIONS DRAWN FROM LOCAL, NATIONAL AND INTERNATIONAL SOURCES AND BECOME A PILLAR OF THE CITY’S CULTURAL PROFILE.

DESIGN RESPONSE
The Artscape is envisaged as the defining characteristic within the wider site context. The new arts museum is elevated above the Artscape, creating a unique maximisation of possible landscape types and experiences and in turn a magnificent conception of a visionary art museum, towering over the Gold Coast – a site of both escape and pilgrimage.

As possible models for the new art museum were explored, it was a gallery in the form of a tower that emerged. Like a bold flower, or a fast growing stalk, it is perhaps the perfect type for the Gold Coast.

Not only is it a unique way to discover the Gold Coast’s art collection and exhibitions, but also an icon of the city and site. If not the tallest then perhaps the most exciting!

The tower form is a nod to the ‘exhibition’ towers of the world – the Eiffel Tower no less, or the Anish Kapoor Olympic Tower for the 2012 London Olympic Games, and also of some topological examples, such as the Guggenheim Museum New York (Frank Lloyd Wright), or The New Museum of Modern Arts in Manhattan (Kazuyo Sejima).

The spiral became an element of the tower too, in the form of a double helix, symbolising the force of life, and a fantastically exciting way to climb or descend the stalk.

The Art Tower has been conceived as a ‘ride’ within the Cultural Precinct. It commences at the very top and spirals down through the various levels, collections and experiences. Should the visitor wish only to engage with the lower levels these can be navigated via the shared stairs and passenger lifts. To exploit the vertical format of the tower there are voids linking between the levels to offer display opportunities for larger works and to serve as wayfinding device. Lighting and gallery conditions will vary depending on curatorial treatment, collection positioning and conservation requirements.

FOR FURTHER INFORMATION ON THIS SECTION, REFER TO THESE GCCP MASTERPLAN SUPPORTING DOCUMENTS:
Exhibition Design Report MP-CMD-0100
THE TOP
The upper levels are for the destination gallery-seeking aficionado. The Friends and Benefactors Lounge (Level 13) is a crows-nest sanctuary—a panoramic viewing platform from which to see the Artscape below, the city and the ocean beyond, and the mountains across the west. Directly above on Level 14 is an open plan café and semi-enclosed observation deck. The first gallery resides on the level below (Level 12) and is dedicated to the art of Asia and the Pacific followed by the art of the Gold Coast on Level 11.

Level 10 is specifically dedicated to photographic and new media. A 140m² 'black box' will be constructed on this floor to control sensory conditions with the flexibility to accommodate myriad types of evolving new media installations. An open plan space with a lateral display system of hanging rails, lighting track and open display plinths sits outside the ‘black box’ for permanent and temporary new media collection items. The other half of this level is split into two clear span open galleries displaying the permanent and temporary (Annual Photographic Art Prize) photographic collections. The clear height to the underside of services on this level is 6 metres to accommodate large format future installations.

Level 9 houses the ‘post ’57’ collection of artwork, photography and mixed media pieces related to artistic expression of local society and recent history together with the renowned ceramics collection (constantly evolving to receive acquisitions from the biennial Gold Coast International Ceramic Art Award).
THE MIDDLE
The centre levels (7-8) form the back of house and meeting hub of the tower comprising administration, collection storage and exhibition preparation, workshops and community gathering spaces. Level 8 solely contains closed collection storage while Level 7 provides a combination of closed storage, with approximately one third of the floor area housing viewable collection storage and an open exhibition preparation area. Level 6 is the administration and meeting space and has suitably lower ceiling heights than other gallery-oriented floors. Education training rooms, meeting rooms and flexible work spaces also reside on this level.

A helix-shaped external staircase allows visitors transcending the building to revolve around its exterior between specific floors. Perhaps these ‘engine room’ levels might be skipped using this device for those seeking to only experience the galleries proper.

Artists’ studios are distributed throughout the tower – an exciting new take of the “artist in the garret”.

THE BASE
The lower levels (levels ground to 5) house the more tourist-, family- and youth-orientated experiences specific to the many facets of the social history and evolution of the Gold Coast together with the Indigenous collections. Proximity of these galleries to the surrounding ground floor zone is vital with the Artscape blooming around the base of the Art Tower and Great Hall complex.

These spaces are engaging, vibrant and dynamic to suit the distinct character and style of the Gold Coast. Level 5 houses the ‘Evolution’ and ‘Style’ galleries celebrating heritage, architecture, fashion and craft via imagery, drawings, multimedia and collection-based installations.

Level 3 is the designated ‘Make and Display’ studio to facilitate collaborations with education and training institutions and is coupled with the Community Gallery, while Level 2 is a highly interactive series of spaces for children and young people to create work across a spectrum of traditional and mixed media.

At ground level is the Great Hall – a 1,000m² conservation grade space for significant travelling exhibitions and installations. The space can be segmented depending on the exhibition requirements at any given time. Transport access to loading docks on this level facilitates the installation and removal of temporary exhibitions. Branching off from the foyer spaces around the Great Hall is the Theatrette, art showroom and retail shop, café and community gallery.
9.2.1/ GREAT HALL

The Great Hall is located on upper ground level at RL 7.0 in close proximity to the Art Tower entrance and the Great Terrace. It is primarily a 1,000m² AA rated gallery space to host and draw touring blockbuster art or museum exhibitions that would otherwise bypass the Gold Coast. It is also flexible – both open-able and subdividable with operable walls. It can be opened to views of the amphitheatre, Evandale Lake and the towers of Surfers Paradise beyond. The Great Hall is supported on upper ground with a generous breakout zone with close proximity to the theatrette and amenities.
ART TOWER - TYPICAL TOWER LEVEL PLANS

LOWER GROUND

UPPER GROUND

PODIUM ROOF

TYPICAL TOWER LEVELS
9.2.2/ ART TOWER

COLLECTION GALLERIES
The Art Tower contains eight gallery levels interconnected with stairs and voids and a grand external spiral stair. These levels contain museum galleries, art spaces, and ‘make and display’ spaces and comprise in total 4,500m² of curated floor area. The curatorial focus of the galleries is addressed in detail in the Exhibition Design Report.

LEARNING & PRODUCTION SPACES
The Art Tower contains a variety of learning and production spaces in the form of galleries, ‘make and display’ rooms, meeting spaces and studios.

ART SPACES
The Museum contains an art space for young children dedicated to creativity and learning through play, and an art space for youth focusing on art and technology including a new media and video production lab.

MAKE & DISPLAY
The ‘make and display’ studio is focused on partnership programming with schools, training institutes and universities.

COMMUNITY GALLERY
The Community Gallery is nominally 100m² and book-able for rotating exhibitions of local artists, art schools and community groups.

LIBRARY & ARCHIVE
A reference library and archive facility for art, design, film and Gold Coast studies of 300m² is located on level 13 and is adjacent to the writers salon and community publishing facility.

WRITERS’ SALON & COMMUNITY PUBLISHING
A writers salon and community publishing facility of 150m² is located on level 13 adjacent to the library. This facility could include a bookshop.

FRIENDS & BENEFACTORS LOUNGE
An exclusive lounge of 150m² is located on level 13 to serve as a lounge and function space for Friends of the Arts together with volunteers and community arts and cultural groups.

STUDIO SPACES
Studios for visiting artists are located on level 7. These are accessible to the public and are collocated with the visible components of the collection storage.
ARTS EDUCATION / TRAINING ROOMS
Two 75m² flexible training/teaching rooms are located in the shared administration facility on level 6.

MEETING/CO-WORKING SPACES
Two 12-seat meeting rooms of 70m², two 6-seat meeting rooms of 50m², and six hot desk positions within a shared office space of 30m² are located in the shared administration facility on level 6.

ADMINISTRATION HUB FOR GOLD COAST
An open office space for 20 staff (300m²) is located on level 6 adjacent to the shared community facilities. The office is located one floor down from collection and handling to encourage stair access between spaces.

THEATRETTE
A 200-seat theatrette is located on level 1 adjacent to the main entry and the Great Hall. The theatrette is conceived to facilitate art cinema, symposia, lectures and artist talks. Its adjacency to the main foyer and lobby enable it to be used outside of museum trading hours.

COLLECTION STORAGE
Collection storage occupies 1,000m² across levels 7 and 8 of the tower which facilitates a relationship and display of the storage and back of house activities with museum patrons as they traverse the tower either via the internal or external stairs.

LOADING DOCK AND EXHIBITION
The loading dock is located on lower ground level at RL 3.0 and allows for an articulated vehicle to enter on-grade into a secured and air conditioned loading dock. The loading dock is above flood level. Adjacent to the dock is a handling and storage zone at RL 4.0 with corresponding void space in the floor over with up to 10m of vertical clearance. The storage and handling area has direct access to the goods lift.
FOR FURTHER INFORMATION ON THIS SECTION, REFER TO THESE GCCP MASTERPLAN SUPPORTING DOCUMENTS:
Riverside Gallery - Mechanical Services Review MP-ARME-0100; Exhibition Design Report MP-CMD-0100
9.2.3/RIVERSIDE GALLERY

An important stepping stone towards realising the Art Tower is a temporary gallery that will introduce the Gold Coast Cultural Precinct as a cutting edge exhibition destination building trust with the wider art community such that the Great Hall can host a successful blockbuster when the ribbon is cut on day one of the Art Tower.

The Temporary Gallery is proposed to occupy one level of the existing Riverside office building which is retained until development of the hotel site commences. The gallery is situated on upper ground level and contains 500m² of flexible gallery space, a 130m² VIP area or separate exhibition area divisible from the main space, an external Artscape occupying the roof of the existing plant rooms, and an entry area and small shop.

The building entry on lower ground level is proposed to be stripped and refurbished with the inclusion of a café and bar and four partnership workshop/studio spaces to be shared between the gallery and the precinct more broadly.

Mechanical upgrades are required to achieve an AA rating which are outlined in the Riverside Gallery Mechanical Services Review.

Further detail on curatorial aspirations and options are available in the Exhibition Design Report.
9.3/PERFORMING ARTS CENTRE

VISION
THE PERFORMING ARTS CENTRE IS ENVISAGED AS A CENTRE FOR EXCELLENCE IN A DIVERSE ARRAY OF PERFORMING ARTS AND ENTERTAINMENT. IT WILL PROVIDE A MIX OF THEATRE SIZES AND FORMATS, CINEMAS, SPACES FOR REHEARSAL, PRACTICE, PRODUCTION, LIVE GIGS AND CIVIC FUNCTIONS AND ACCOMMODATION FOR RESIDENT PERFORMING ARTS ORGANISATIONS. THE CENTRE WILL CARVE OUT A NICHE IN TOURING AND HOMEGROWN PRODUCTIONS, DEVELOPING LOCAL TALENT THROUGH A LIVELY PROGRAM OF PRODUCTION, PRESENTATION AND PARTICIPATORY EVENTS.

DESIGN RESPONSE
The Performing Arts Centre comprises a new 1,200 seat Lyric theatre, refurbishment of the existing theatre to a 600 seat Playhouse theatre, four cinemas and numerous flexible venues, and supporting retail, bars, foyers and back of house facilities. The Performing Arts Centre defines the north face of the Great Terrace and the adjacent open public space as it gently slopes down to Evandale Lake.

The design approach for the Performing Arts Centre resists the purely architectural, and instead explores the prospect of an emerging zone, a field, a mound, an iteration, or even something more of an evocation than a finale.

The design approach is both a methodology and a strategy. It’s method is entirely consistent with the cellular field of the entire site, but here it is dramatically interpreted, not so much in terms of style or form, but more as an embracing structure in which renovation of the existing building and the development of the new are designed to become a single dynamic entity.

The design approach is strategic too, able to embrace the really flexible needs of this highly functional building type. Instead of shoehorning function into a desirable architectural form, the architectural solution emerges as an embrace, like a draped net or a soap bubble in the bath.

And instead of the fly towers becoming the ‘big problem’ of design, they are allowed to simply erupt, like unexpected flowers, or like the crowning feathers of a spectacular bird of paradise. The exception to this approach is the Black Box. Here, the cell has been interrupted and reinterpreted as a packaging box spectacularly appearing to open to the lake and the new Friendship Bridge, as if hovering over the water, both self-explanatory and mysterious.

The facilities are linked by a linear foyer that traverses the building along its interface with the public open plaza of the Great Terrace. It is a building that is outward looking, maximising the views and spectacular landscape. The entry is focused at the Great Terrace, the site’s epicentre, its melting pot. The outlook is directed to the Artscape, the lake, the river and the city beyond.

FOR FURTHER INFORMATION ON THIS SECTION, REFER TO THESE GCCP MASTERPLAN SUPPORTING DOCUMENTS:
Digital Strategy MP-SSDS-0100; Theatre Return Brief MP-SSTH-0100; Acoustic Survey Report MP-MDAS-0100
9.3.1/ Foyers
The foyers are welcoming, logical, and easy to move through. There is ample space to allow for groups of people to stand and sit together without creating traffic jams with other patrons moving to and from their events. The foyers are well activated spaces occupied for most of the day – not just for performances. All venues, auditoria and cinemas are connected by this linear interface which spills out to the Great Terrace which becomes an outdoor foyer – perfect for the Gold Coast climate – connecting the Performing Arts Centre with the Artscape and the rest of the precinct. The foyer space accommodates bars, kiosks, and temporary pop-up outlets as well as digital potential for virtual connection to live theatre programming.

9.3.2/ 1200 Seat Lyric Theatre
The Lyric Theatre comprises 1,200 seats arranged in three tiers (stalls, dress circle, and balcony) plus rows of removable seats on the orchestra pit. The rakes are carefully designed to optimise sight lines and ensure an intimate patron experience. The theatre is designed to accommodate a full sized orchestra, large scale musicals and classical dance performances but would equally accommodate cinema for film festival. The orchestra pit accommodates the standard 32 musicians. An additional forestage lift could be added at increased cost to increase capacity to 60 musicians. Above stage acoustic panels enable proscenium arch and concert hall configurations. The Lyric Theatre has a full sized fly tower. More details of the technical provisions for the Lyric Theatre are available in the Theatre Return Brief report.

9.3.3/ 600 Seat Playhouse Theatre
The Playhouse Theatre is a renovation of the existing Arts Centre theatre. The stage will not be renovated. The auditorium will be fully renovated and reduced to 600 seats in a single rake. This will allow significant improvement to the sight lines, a more intimate patron experience and rectification of the various accessibility shortcomings. More details of the technical provisions for the Playhouse Theatre are available in the Theatre Return Brief report.

9.3.4/ Black Box Theatre
The Black Box is a flexible studio theatre which can be opened up to the adjacent venue to create premium venue space overlooking the lake. The Black Box is 18m x 17m with 9m vertical clearance and includes retractable seating for 250 audience, an elevated control room, and a lighting grid to cover the full floor to allow for multiple performance areas.
9.3.5/ BACKSTAGE & DOCK
Loading is located on the north between the back stages of the two theatres. The dock is undercover and proscenium height circulation is provided to each stage and to the production workshop and scenery store adjacent. The loading dock has provision for two semi-trailers simultaneously. The set production and scenery store is centrally located between the two theatres and beside the loading dock.

9.3.6/ GREEN ROOMS & DRESSING ROOMS
The existing dressing room facilities on upper ground and lower ground adjacent to the 600-seat theatre are being refurbished and new dressing rooms are provided behind the 1,200-seat theatre. The total dressing room provision is four sized for 2 performers, four sized for 4 performers, and four sized for 20 performers. A new large common green room is provided behind the 1,200-seat theatre and could be closed off for meetings or functions if there was sufficient gap in the performance programme. Stage door has direct access to the green room and dressing rooms adjacent, the basement carpark, and to the outside at the north of the Performing Arts Centre building. Access to the public foyer from stage door is via the upper foyer and bar on level 1.

9.3.7/ REHEARSAL SPACES & INCUBATORS
The Performing Arts Centre includes two double-height rehearsal spaces located on lower ground level adjacent to the dressing rooms and stages. They are designed to allow for direct connection and ease of access for performers, scenery, equipment, musical instruments etc to the Lyric and Playhouse stages. The rehearsal rooms also function as holding space for performers during eisteddfods, musicals and other performances with large numbers of performers. Rehearsal Room 2 is visually connected to the public from foyer level and can be accessed through the lake side food and beverage at lower ground. Both rehearsal rooms could be made accessible after hours if necessary.

The Studio incubator space functions as a flexible, creative performance room for rehearsing, devising performance, public previews and workshops. Located on upper ground and accessible directly off the main foyer, this space is designed as a space for theatre-making that is visible and engaging to the public, available to performing arts organisations to reside at the Cultural Precinct. This space could be managed through fixed term leases on a rotating basis and will be tailor-able to the specific requirements of the organisation – for example sprung floors for circus troupe, additional acoustic treatment for a musical ensemble. These groups would also be given access to the administration areas, and in turn, Performing Arts Centre staff could use the Studio as casual meeting space. The Studio is equipped with adjoining servery facilities to enable it to also operate as a venue.
9.3.8/ RECORDING & PRODUCTION STUDIO
A pre-am quality studio is located on lower ground level with capacity for full band recordings and will be connected to theatre spaces to allow live recordings of performances. The facility could also be used for training and amateur sound and music recording and production.

9.3.9/ CINEMA
The cinema complex is located on upper ground level adjacent to the main entry and comprises one 250 seat theatre, two 140-seat theatres and one 100-seat theatre. The cinemas are intended to support public screening, projection and syndicated programming and real-time links with the local film and television industry, other cultural institutions and festivals associated with film and digital media nationally and around the world. The cinemas are located to enable construction to occur while the existing cinemas stay open, thus minimising loss of trade.

9.3.10/ VENUES
There are a variety of venues included in the Performing Arts Centre to complement the core cultural functions and increase the vitality of the centre. In addition to the Black Box and incubator venue described above there are two designated music venues, one in the renovated basement and another on foyer level. Four further commercial hire venues on level 1 face east to the lake and skyline views. Three of these are connectable into one large venue. Various bars and lounges are included in the centre's foyer spaces, while the foyers are also able to accommodate pop-up outlets during peak performance times.

9.3.11/ STAFF SPACES
Staff administration areas are accommodated at foyer level and level 1 above, with further staff/back of house allocation in the former Moncrieff Room on level 2.
BLACK BOX
VENUES
CINEMAS
NEW THEATRE

ANGEL PLACE THEATRE (RECITAL HALL TYPE)
NATIONAL THEATRE (THRUST STAGE TYPE)

THRUST STAGE ALTERNATIVE
RECITAL HALL ALTERNATIVE
MASTERPLAN LAYOUT
The theatre brief for the Performing Arts Centre is for a 1,200-seat Lyric Theatre and a 600-seat Playhouse Theatre together with a Black Box theatre and various less formal performance spaces. ARM and Schuler Shook were asked to investigate the impact of alternative theatre formats for the new 1,200-seat theatre in the event that greater diversity may be determined to be more commercially viable, and offer greater flexibility in accommodating a broader range of performance types.

Our analysis of alternatives focuses on potential spatial constraints rather than any comment on the commercial or cultural viability of alternative formats at this capacity. The profile diagram opposite shows the spatial comparison between the proposed 1,200-seat Lyric Theatre overlaid with a similar capacity recital hall, Angel Place in Sydney, and similar sized thrust stage theatre, The National Theatre in Canberra.

The recital hall format is a physically smaller format which will have no adverse spatial impact on the Masterplan. The internal planning of the Performing Arts Centre can remain essentially as is and the Artscape can readily expand to take up the slightly reduced footprint. Recital halls often have greater acoustic demands and there may be additional costs in order to realise these.

The thrust stage format is a physically larger format. They tend not to have balconies or where they do these have minimal overlap. The thrust format theatre will require alternative internal planning and will generate a slightly larger building envelope although this is not significant at this point of development. As demonstrated in our site diagram the impact on the Masterplan is negligible and the surrounding Artscape can simply be massaged to accommodate this increased footprint.

In summary, having completed this analysis ARM believe there is no adverse impact to the Masterplan in considering alternative theatre formats.
9.4/ SITEWIDE & SHARED PROVISIONS

VISION

VARIous GENERAL AMENITIES AND SPACES WILL BE PROVIDED TO SUPPORT SUCCESSFUL, OPERATIONAL AND USE OF THE CULTURAL PRECINCT. EVEN WITH SEPARATE BUILDINGS, IT MAKES SENSE FOR SOME OF THESE TO BE SHARED AND MANAGED FROM A SINGLE POINT OR PROVIDER. THROUGH COMBINATION, COLOCATION OR STRATEGIC DISTRIBUTION, THESE SITEWIDE AND SHARED PROVISIONS WILL FACILITATE EFFECTIVE OPERATION AND ENHANCE USERS' EXPERIENCES.

EAT, DRINK, SHOP

Differences and choice is fundamental - we propose a variety of options throughout the precinct from fully catered function spaces within the Art Tower and Performing Arts Centre to temporary markets and pop-up kitchens on the Great Terrace and multiple opportunities for dining on the water's edge. Options within the Art Tower and Performing Arts Centre include:

ART TOWER
• The Great Hall (flexible and divisible venue)
• Ground floor foyers for functions of all sizes
• Ground floor café
• At the top of the tower, roof lounges and fine dining with peerless panoramic views

PERFORMING ARTS CENTRE

Spectacularly located venues are orientated towards the Stage and Lawn, Evandale Lake and Gold Coast skyline on level 1 - the best seats in the house. In addition, a music venue at basement level. These new venues replace the existing Paradise Showroom, Panorama Suite and Lakeside Terrace. They are all capable of being serviced from the existing Paradise Showroom, Panorama Suite and Lakesides Terrace.

ARTSCAPE

Casual eateries, cafés, and pop-ups are located throughout the precinct:
• Esplanade food and beverage on the beach adjacent to Evandale Lake
• Sunday markets on the Great Terrace under the shade of the 'Living Umbrellas' at the heart of the precinct with views over the Stage and Lawn and the Gold Coast skyline beyond
• Pop-up kiosks on the Friendship Bridge
• Waterfront dining on the Nerang River
• Cafés within the foyers of both the Performing Arts Centre and the Art Tower
• Food trucks associated with large scale events on the Stage Lawn

9.4.1/ PUBLIC ENHANCEMENT AREA

WAYFINDING

The wayfinding structure is shown in Chapter 8/Getting There. The wayfinding design is a detailed design exercise that will be commenced at a later stage and will:
• Help guide visitors who have planned to come to the Cultural Precinct and attract those who haven't
• Be legible and easy to understand so that visitors, regardless of age or language spoken, need only incidental attention to finding the way and can concentrate more on enjoying their route to and within the Cultural Precinct
• Be distributed and installed within at least a 2km radius, and particularly reach to Chevron Island, Surfers Paradise and along the light rail corridor
• Be a combination of fixed signage, digital signage, viral marketing and light projections in the vicinity
• Have hybrid features, which tie into the digital environment such as smart phone apps and online mapping and transport information sites

PUBLIC AREA LIGHTING

The public area lighting is addressed in detail in the Lighting Strategy Report. The lighting design drivers are accessibility and comfort, community ownership and identity, enjoyment, sustainability and perception of safety. There exists fantastic opportunity for an app to be developed for the precinct that has an ability to control aspects of the lighting system and for public movements to affect aspects of the lighting such as intensity, colour or direction. The public lighting system will be an important plank in the digital potential response.

SECURITY & CCTV

The Cultural Precinct will be highly digitised. CCTV will be used in many of the activation initiatives meaning enhanced natural surveillance through CCTV will be both practically and conceptually simple to incorporate into the precinct. The precinct design is grounded in the simple CPTED principles where positive behaviours are encouraged through Natural Access Control, Natural Surveillance and Territorial Reinforcement. The precinct will have a central security hub located in the Performing Arts Centre.

PUBLIC ART BUILT IN

A variety of public art installations are anticipated within the Artscape. The curatorial strategies for an outdoor public art program will link and overlap with the curatorial aspirations within the Art Tower to create a precinct-wide connection. The budget allocation for public art alone cannot hope to meet the ambitions of the Artscape.

FOR FURTHER INFORMATION ON THIS SECTION, REFER TO THESE GCCP MASTERPLAN SUPPORTING DOCUMENTS:
- Lighting Strategy Report MP-EL-0100-[0]
- Digital Strategy MP-SSDS-0100-[0]
- Landscape Report MP-TOP-0100-[0]
- Landscape Audiovisual Presentation MP-TOPP-0100-[0]
- DDA & Accessibility Review MP-NMC-0100-[0]
- Building Surveyor Report MP-PLP-0100-[0]

LAKESIDE FOOD + BEVERAGE

RIVERFRONT FOOD + BEVERAGE

HOTEL FOOD + BEVERAGE

FOOD + BEVERAGE

RETAIL

POTENTIAL POP-UP FOOD + BEVERAGE
9.4.2/RETAIL SPACES
An outlet and showroom for Gold Coast arts and craft is located in the Art Tower together with an art and design bookshop. A high end retail offer is proposed for the hotel and convenience retail is allocated to the commercial allied use buildings. The Masterplan does not preclude further retail if market forces were to dictate that some food and beverage is better allocated to retail in the future.

9.4.3/FOOD & BEVERAGE OUTLETS
Food and beverage outlets are focused on the waterfront areas adjacent to the ferry terminal, the lakeside frontage of the Performing Arts Centre and the hotel. Further food and beverage is located throughout both the Performing Arts Centre and the Art Tower, the Great Terrace, and pop-up food and beverage is proposed for the Friendship Bridge and the Lawn and Stage. Food and beverage should cater to a range of styles and affordability and some may double as entertainment venues.

9.4.4/CATERING KITCHENS
A central precinct catering kitchen is provided on ground level of the Performing Arts Centre. This kitchen would cater for civic events, public programs and commercial hire of function venues within the precinct. The Art Tower has a plating kitchen associated with the Great Hall. All food and beverage retail has its own designated kitchen.

9.4.5/AMENITIES
Public toilets are allocated to the Performing Arts Centre, the Art Tower, the end-of-trip facilities, the riverfront dining, the lifeguard pavilion and the multi-level carpark, as well as a larger facility for public toilets, change rooms and outdoor showers between the lake and the Stage.
An end-of-trip facility is proposed for the ground level of the Performing Arts Centre beside the lake which includes bike storage, showers, toilets and lockers.
Potable water drinking fountains are located throughout the precinct.
In the earlier stages of project delivery, before the Art Tower and Performing Arts Centre are complete, public toilets will be provided in the Riverside Building.

9.4.6/OPERATIONAL SPACES
A centralised operation centre is located on ground level of the Performing Arts Centre to house precinct management, security and maintenance. The facility includes office space, a workshop, external areas for parking vehicles and storing maintenance material.

9.4.7/UTILITIES & SERVICES
The precinct services are centralised and shared. A central energy plant is located in the ground floor of the Art Tower. A central water treatment plant is located adjacent to the southern residential development site. The site will be served by high speed wifi.
9.4.8/CAR PARKING
The site strategy is to create a park, not a car park. The car parking is consolidated in a multilevel car park on Bundall Road and under the Great Terrace. A small amount of street parking exists adjacent to the various development sites and riverfront food and beverage. The multi-deck is proposed as three levels, one half a level down, one half a level up and roof top with shade structure over.
9.4.9/EVENT OVERLAYS

From a weekend visit to spend a day at the lake, to attending a concert at the Stage; a digital arts festival or a hawkers food market; a simulcast skate tournament to a digitally integrated educational walk — flexibility of infrastructure and services is critical. This expectation sets the tone for an environment that invites responsiveness and adaptation with ease — a place where hard infrastructure, communication and social systems are intertwined.

Sitewide services are designed such that the precinct can easily adapt to changing technologies. High speed data networks are reticulated around the site to event nodes and fixed features to create a fully flexible, future-proofed site able to accommodate many types of events.

Beyond the main infrastructural system serving the buildings on-site, the Artscape is serviced by power, water and data for events, lighting, security, temporary art and events, pop-up food outlets, as well as maintenance requirements via an underground infrastructure backbone around the site perimeter with localised site nodes available as access points at strategic locations. Fibre and active equipment will be installed within this infrastructure over a period of time as the need requires.

WEEKEND

Weekend activity will gravitate towards the lake, waterfront dining precinct, the Art Tower and the Performing Arts Centre during show times.

MARKET

The size of the Great Terrace can facilitate events such as a market or workshop. This central position and the shade umbrellas allow for the site to be used flexibly.
EDUCATIONAL OPPORTUNITIES
The landscape provides opportunities for the educational experience to spill out of the buildings and into the landscape. Both permanent and temporary exhibitions and artworks will form part of this educational journey.

OPEN AIR CONCERT
The Lawn and Stage is generous in size to accommodate for a large number of people. The flexible nature of the facility means it can be used in a variety of modes.

ART EVENTS
Art gardens throughout the landscape frame open air rooms for temporary art installations. Landmark art installations and gardens are also placed in key arrival spaces.
SPORT ACTIVITIES
Sporting activities take place in a number of locations across the site. These spaces include swimming lanes in Evandale Lake, volleyball court, skate bowl, climbing structures and basketball courts.

INDOOR EXHIBITIONS, PERFORMANCES & EVENTS
The Art Tower has 8 levels for exhibition purposes. Large exhibitions can be held in the Great Hall situated in the podium of the Art Tower and can use the Great Terrace as a spill out area.

The Performing Arts Centre includes a 600-seat theatre, a 1,200-seat theatre and several venue spaces catering for a range of event sizes. The Great Terrace acts as an extension to the buildings to perform as an open air foyer.
COMMERCIAL & ALLIED USE
There are four development sites proposed within the Cultural Precinct over and above the food and beverage discussed in 9.4/ Sitewide & Shared Provisions, and one further site located on Chevron Island. The Masterplan proposes an integrated strategy for siting the development parcels to maximise the site’s value and maximise the contribution they may make to create a diverse and vibrant precinct. A radial roadway provides a precinct address for all development sites.

SITE B1 is residential with two towers on the north river bank.

SITE B2 is commercial allied use with two low rise towers orientated to preserve visual and physical permeability.

SITE B3 is residential with two towers on the southern river bank.

SITE B4 is a hotel site adjacent to the Art Tower with aspects to the Lawn and Stage, Nerang River to the south and Surfers Paradise to the east.

SITE C is located on Chevron Island with close proximity to the Chevron Island shops and views of the Cultural Precinct from upper levels.

FOR FURTHER INFORMATION ON THIS SECTION, REFER TO THESE GCCP MASTERPLAN SUPPORTING DOCUMENTS:
Planning Report MP-TP-0100
11.1/ STAGING

The Masterplan is configured to allow a logical staged delivery. The staging is envisioned in three stages commencing with Stage 1 which is itself divided into three components. The staging diagrams are shown above and following.

STAGE 1A

Stage 1A consists of the Lawn and Stage, the Riverside Gallery, the Evandale Lake edge improvements and the foundations for the riverfront dining precinct.

Stage 1A is shown in detail at the end of this section. It requires closure of Ouyan Street and the demolition of the existing Administration Building, retaining the south-eastern portion known as the Riverside Building.

This first stage interfaces with the lake, the existing park land, the existing Arts Centre and the existing main precinct car park. Its position in the centre of the precinct means there needs to be a balance between providing temporary landscapes to interface with adjoining surrounds and creating a space that realises the first chapter of the vision.
STAGE 1B
Stage 1B introduces the Friendship Bridge and completes the link between it and Stage 1A. Stage 1B involves interfaces with the lake and on Chevron Island includes upgrades to Stanhill Drive and Mawarra Street interfacing with Karloo Street and Thomas Drive. Aspects of the surrounding Artscape will remain temporary to allow construction access to the peninsula for Stage 1C.

STAGE 1C
Stage 1C completes the peninsula component of the Artscape and includes the addition of the ferry terminal and lakeside food and beverage. Subject to third party investment Stage 1C will be enabled when development of Site B1 (residential) and the riverfront food and beverage buildings are realised. The main interfaces of the Artscape component are the river and lake. Aspects of Stage 1A and 1B which have been delivered in a temporary fashion to allow construction access for Stage 1C will now be able to be completed.

The residential development Site B1 interfaces with the existing car park and north-western corner of Bundall Road parkland. Temporary works will be required to the existing car park to enable firstly construction and then car access and a suitable address until such time as the surrounding Artscape is realised.
STAGE 2
Stage 2 delivers the Art Tower together with the bulk of the Great Terrace, both precinct car parks and a large portion of the remaining Artscape. Stage 2 will allow development of Site B3 (residential) and at completion of the Art Tower, development of the hotel. Stage 2 involves closure of Ouyan Street and involves access considerations for the existing building at 9 Ouyan Street during construction. Stage 2 has a detailed interface with the existing Arts Centre entry and drop off. This area will need significant focus through Schematic Design and Design Development to ensure a resultant environment that is exceptional yet mindful of the future outcome in a manner that minimises temporary and redundant works.

To the west, Stage 2 interfaces with Bundall Road and, with the completion of the car park building, is the precinct’s first opportunity to present a finished and inviting environment to Bundall Road.
Stage 2 will include the central energy plant and with the Art Tower will include most of the significant service upgrades and renovations.

STAGE 3
Stage 3 comprises the Performing Art Centre and remaining Artscape and completes the precinct. The Stage 3 interfaces are primarily previously completed stages of work. Construction considerations will include site access during works to the precinct entry. Temporary alternative access exists via Crombie Avenue which will serve most areas of the precinct while ongoing temporary access will be required for Site B1.
Stage 3 will allow development of Site B2 and will complete the precinct’s Bundall Road address.
DETAILED LANDSCAPE PLAN
The landscape Masterplan has been developed in conjunction with ARM Architecture’s masterplanning process as well as from client guidance and input. As such, the remodelling of existing buildings and the introduction of the commercial zone has been integrated into the landscape concept. Programmatic elements have been redistributed according to the most up-to-date flood model, which maintains existing elevation on the eastern portion of the peninsula. Park elements including playgrounds, gardens, artworks, water features, informal sport areas and pavilions have been located according to existing conditions, competition and design development comments and the request to introduce a wide ranging programme.

In addition, the Evandale Lake has been reshaped offering varied approaches and differentiated qualities along the water’s edge. The amphitheatre has been repositioned according to the results of the acoustic study, viewed priorities and client feedback. Between the elevated western portion and lower eastern portion of the peninsula, elevation change has been negotiated through landscape terraces with integrated stairways and seating, offering amphitheatre-esque locations for small events, performances and gatherings. Lastly, specified welcome areas have been introduced to pleasantly greet visitors and to define and highlight main entrances.

As an integral part of the planting concept, the maximum number of existing trees have been maintained to enhance the immediate result of a lush park. Additional planting on-site is introduced for environmental benefit, character and atmospheric effect. Planting areas are differentiated by thematic plant zones determined by ecosystem types, colour and aesthetic appeal.

The material and furniture concept was developed further with the intent of making landscape differences legible to the visitor. The varied materiality of the path system defines a hierarchy of space, while differentiation in furniture is dependent on flood probability. On the western portion of the site, furniture is topographically integrated, while on the east flood prone furniture is designed to float in place to respond appropriately to flood events.

Lastly, general landscape design guidelines have been developed for the private commercial and residential development areas.

For further information on this section, refer to these GCCP Masterplan supporting documents:
Landscape Report MP-TOP-0100, Landscape Audiovisual Presentation MP-TOPP-0100
12.2/ECOLOGY

12.2.1/ECOLOGICAL REPORT

Biome Consulting Pty Ltd has been engaged to prepare an ecological report incorporating an inventory of the terrestrial and marine flora and fauna present at the Gold Coast Cultural Precinct site at Bundall.

The Ecological Assessment Report presents the findings of ecological investigations undertaken during late July 2014 and establishes baseline information focused on three areas of study, including:

- Terrestrial values - flora
- Terrestrial values - fauna
- Marine foreshore values

The results of the assessment identify key features of ecological importance located on the precinct site, along with a number of potential environmental constraints and opportunities which should be given consideration during masterplanning and subsequent detailed design phases of the project.

12.2.2/BOTANICAL OVERLAY

In conjunction with Topotek 1 landscape character and management zones have been designated according to the proposed character and amenity and cognisant conditions found on-site. Zones have been designated according to site conditions including micro climate, prevalent winds, and reoccurrence of drought, sub-tropical climate, soil conditions and anticipated visitor impacts. The landscape character and management zones are as follows:

- Natural Area
- Urban Promenade
- Bundall Road Landscape
- Special Planting Area
- Water Sensitive Urban Design (WSUD)

CUSP has produced a Botanical Overlay: a master plant palette to inform landscape design decisions related to species selection for the Gold Coast Cultural Precinct. This detailed list includes information such as species name, common name, growing conditions, growth habit, designation of plant species per landscape character zone taking into consideration site conditions, points of botanical interest, indigenous significance including traditional uses of the plants, flower colour, identified in the City of Gold Coast Plant Selection Guide, Australian Native status and plant image.

The Botanical Overlay also provides guidelines for plant availability and quality, procurement options and establishment maintenance.

FOR FURTHER INFORMATION ON THIS SECTION, REFER TO THESE GCCP MASTERPLAN SUPPORTING DOCUMENTS: Botanical Overlay 2014 MP-CBBO-0100; Ecological Assessment MP-CBEA-0100
12.3/ THEATRES & PERFORMING ARTS

12.3.1/ DIGITAL STRATEGY

The Digital Strategy report includes a number of discrete steps to better define the digital and physical elements that must be considered at the master planning stage. This report is intended to be updated and enhanced during design to dig deeper into the details of the strategy.

The report includes the following sections:

VISION
This section of the report succinctly summarises the many ideas that have been offered by the City of Gold Coast, Arts Centre Gold Coast, and ARM’s competition submission. It also summarises some of the less exotic but equally important technologies like public address systems.

EXPERIENCE
Enhancing the experience of attending and working at the Gold Coast Cultural Precinct is the most important function of the Digital Strategy. The grand vision must be shaped and integrated into a coherent set of tools that can be used to build a superior service that is fully functional and easy to maintain. In this section we provide some fictional scenarios of how this technology might be used to create a superior experience. The information is written from the point of view of several likely patrons, artists, technicians, and management.

TOOL BOX
To create the desired experience a digital tool box needs to be defined. This section of the report breaks down and defines each of the major elements in the tool box. It includes everything from a large format high definition video wall to an app for hand held devices.

DIGITAL SUPPORT
Because technology is rapidly advancing and new requirements will be identified once the centre is up and running, it is likely that many elements of the tool box will not be installed during the construction process. However the support for the tool box will need to be in place when the building opens. This section defines these proposals and will further the engineering process.

PHYSICAL SPACE
The final section of the report seeks to define the architectural elements that may be affected by the Digital Strategy. As noted above, this could include how audience services are planned and designed, where space is needed for the integration of visual elements in all areas, as well as support spaces such as control rooms and data centres.

12.3.2/ MASTERPLAN THEATRES BRIEF

Theatre Return Brief covers theatre planning for all the performance areas of the project including:

- Common foyer
- 1,200 seat Lyric Theatre
- 600 seat Playhouse (renovated existing theatre)
- Studio Theatre
- Back of house space
- Equipment systems
- Amphitheatre
- Cinema

This Masterplan is based on the briefing information provided by City of Gold Coast, interviews with the Arts Centre Gold Coast staff, and the experience of Schuler Shook.

12.4/ ACOUSTICS

As part of the Gold Coast Cultural Precinct Masterplan, Marshall Day Acoustics (MDA) has conducted an initial assessment of noise associated with the operation of the proposed amphitheatre.

A site inspection in the vicinity of the subject site was made by MDA on 19 May 2014 and noise logging was undertaken between 5 and 13 July 2014.

The Acoustic Survey report provides a preliminary assessment of music noise emissions, recommendations for the design of the amphitheatre canopy, an overview of Queensland noise control policies and an analysis of the potential restrictions on operations.

FOR FURTHER INFORMATION ON THIS SECTION, REFER TO THESE GCCP MASTERPLAN SUPPORTING DOCUMENTS:

- Acoustic Survey Report MP-MDAS-0100
- Amphitheatre Noise Impact Report MP-MDNI-0100
- Digital Strategy MP-SSDS-0100
- Theatre Return Brief MP-SSTH-0100
- Liquor Licensing Review of Noise Impact Assessment MP-LLNI-0100
12.5/EXHIBITION DESIGN

The purpose of the gallery and museum design component of the Gold Coast Cultural Precinct Masterplan is to inform and document the desired requirements and outcomes for the Art Tower and Artscape elements of the proposed Gold Coast Cultural Precinct. This Exhibition Design Report also addresses the requirements of the proposed Riverside Gallery - a temporary facility to store and exhibit collection and house related activities and production environments in the initial stages until the Art Tower is complete.

The report seeks to document and respond to the aspirations and requirements identified in curatorial planning documents and at various workshops held over the past few months with the gallery team and wider project team. The report includes a suite of drawings to serve as a 'first pass' in establishing the positioning of collections within the tower and explore the potential relationships between collections, levels and experiences on offer.

The initial development of the Art Tower identified several characteristics and opportunities presented by the unusual vertical format of the gallery as tower. These included:

1. Isolation or grouping of levels depending on conservation requirements
2. Grouping of complementary collections on the same or nearby levels
3. Multiple ways of engaging with the tower (top working down, or base working up)
4. Social history and local cultural content on lower levels for greater access from ground level
5. Dedicated high-end galleries at the top of the tower
6. Great Hall temporary exhibition space located in the base of the tower

The position of the levels and subsequent content has been adjusted to reflect the organisation of content and themes as outlined in supplied curatorial strategy documents. The stated desired area for each gallery exceeds the allowance in the agreed Art Tower plans, so grouping of allied galleries has been necessary. Further discussion is anticipated to clarify the relative prominence of some collections and themes over others.

Education zones which will cater for primary and secondary students will be located within the tower but informal learning environments tend also to prove effective within gallery spaces and amongst the work while learning. The allocation of temporary exhibition space seems ample at this early stage between the Great Hall and dedicated zones within some other gallery levels. As the curatorial approach develops, the floors will become a mix of more permanent exhibition spaces and areas subject to higher collection turnover. Greater understanding of programming intentions will be achieved on receipt of the business plan.

FOR FURTHER INFORMATION ON THIS SECTION, REFER TO THESE GCCP MASTERPLAN SUPPORTING DOCUMENTS:
Exhibition Design Report MP-CMD-0100
The primary objective of the Lighting Strategy is to promote good light planning in the public realm of the precinct through:

• Creating the perception of safety and amenity of all users of the precinct at all times
• Complementing the proposed landscaping and built form in a way that will aid wayfinding
• Encouraging night-time visitation of the precinct by creating well-lit paths and spaces which are cohesive and memorable
• Enhance sustainable design outcomes through minimising the negative environmental impact of outdoor lighting
• Exploring how lighting can form part of the digital potential of the precinct

The scope of this strategy includes the external lighting to areas and elements within the precinct including:

• Great Terrace
• Amphitheatre
• Ferry terminal
• Friendship Bridge
• Skate park and other sports areas
• Steps, stairs and pathways throughout the site
• Picnic areas, kiosks and playgrounds
• Façade lighting of the Art Tower and the Performing Arts Centre
• Retail and dining areas

The strategy also addresses internal lighting of the Art Tower and Performing Arts Centre, art installations and nodes within the Artscape and the digital potential of lighting throughout the precinct.

For further information on this section, refer to these GCCP Masterplan Supporting Documents:
Lighting Strategy Report MP-EL-0100
12.7/ENGINEERING

12.7.1/ BRIDGE ENGINEERING

A key element of this Masterplan is a proposed pedestrian and cyclist bridge linking the Gold Coast Cultural Precinct site with Chevron Island to the north, to be known as the Friendship Bridge.

A Navigation Study has been undertaken to inform the design of the bridge.

A conceptual structural design for the bridge has been developed using a simplified model of the bridge deck and piers with applied load calculations to represent the canopy of the bridge.

The predicted impact of the proposed bridge infrastructure on flood levels has been assessed using TUFLOW modelling software. A sensitivity analysis has been undertaken which indicates that with refinement of the structural design it may be possible to reduce the flood impacts to meet Council’s approval criteria.

There is a commitment for the Friendship Bridge to be accessible to all. The current conceptual structural model shows both northern and southern approach ramps are consistent with Australian Standard AS 1428.1-2009 Design for access and mobility – General requirements for access – New building work.

The conceptual structural design developed for the Friendship Bridge established these outcomes:

- Provides for the proposed navigation design criteria
- Is predicted to have an off-site flood impact, but that this can be mitigated by further works within the Gold Coast Cultural Precinct site
- Provides for equitable access, consistent with AS1428.1-2009
- Will require the acquisition of the property at 233 Stanhill Drive, as the location for the northern approach ramp
- Will require minor modifications to the road at Stanhill Drive to accommodate the northern approach ramp
- Can be constructed from floating plant on the river, and from within the available land at 223 Stanhill Drive and at Evandale

12.7.2/ COASTAL STRUCTURES

The Gold Coast Cultural Precinct site is bounded to the north and east by the Nerang River. Arup has undertaken a series of engineering studies and assessments to inform the development of a Masterplan that appropriately addresses the precinct’s interfaces with the Nerang River.

Studies and analyses undertaken for the report include:

- Submarine utility search
- Erosion study
- Vessel navigation and berthing requirements
- Boardwalk and platform structure assessment
- Accidental vessel impact study

Based on the findings of these studies, recommendations are made in the report regarding optimum uses and locations for elements included in the Masterplan.

12.7.3/ WIND

To achieve the ambitions of the Gold Coast Cultural Precinct, it is critical that the outdoor areas on the site area have excellent external comfort, which is driven by solar exposure and wind effects. Arup has undertaken an analysis of these elements for the site, and identified recommendations on potential measures to improve external comfort.

A wind analysis has been undertaken using Vasari software, and is based on a 3-D Rhino model of the proposed masterplan. This analysis has identified how wind will flow through the developed precinct, and in particular has identified potential wind tunnelling that may cause occupant discomfort.

12.7.4/ ENVIRONMENTAL CONSTRAINTS & OPPORTUNITIES

Arup has prepared an Environmental Constraints and Opportunities Report (ECOR). The report incorporates desktop review and where available, existing detailed studies, to describe the baseline environmental conditions at the site and identify possible constraints and opportunities relevant to the development of the site in regards to:

- Ecology
- Geology and soils
- Land use
- Landscape and visual amenity
- Water quality and waterways
- Air, noise and vibration

12.7.9/ TRAFFIC

Arup has undertaken a detailed assessment of five key transport aspects of the proposed development.

- Public transport (buses, taxis and ferries)
- Active transport (bicycle and pedestrian amenity)
- Car parking
- Servicing vehicles (maintenance and emergency access)
- Impacts on the surrounding road network

FOR FURTHER INFORMATION ON THIS SECTION, REFER TO THESE GCCP MASTERPLAN SUPPORTING DOCUMENTS:

Transport Report MP-ARTR-0100; Coastal Structures Report MP-ARCS-0100; Environmental Constraints and Opportunities Report MP-AREN-0100; Concept Wind Analysis Report MP-ARWS-0100; Friendship Bridge Engineering Report MP-ARBR-0100
12.7.5/ SUSTAINABILITY

Arup has prepared a Sustainability Report to set sustainability objectives and criteria for the Gold Coast Cultural Precinct at the masterplanning phase. These are based on a review of case studies, relevant planning policy and legislation and guidance from sustainability rating tools that are relevant to the project (e.g. Green Star Communities and IS Rating Tool).

Sustainability initiatives have been proposed across a range of focus areas including energy and carbon, waste management and materials, water management, biodiversity, community, transport, economy and management. Some high level modelling has been undertaken to determine if energy and water targets are feasible. Constraints have also been identified.

A sustainability workshop was held with the design team and City of Gold Coast to determine the sustainability approach that should be taken forward for the Gold Coast Cultural Precinct. Whilst the project would meet the eligibility criteria, Council are not seeking a Green Star Community rating for the Precinct, however it would guide the selection of initiatives and targets. Nevertheless, it is recommended that Council continue to track progress against the sustainability targets and commit resources to ensuring the initiatives outlined are incorporated into the next phases of the project, to meet the objective of achieving a world class cultural precinct.

Some of the key initiatives proposed for the Gold Coast Cultural Precinct are:

- Incorporating Building Integrated PV on the proposed cultural buildings, to generate renewable energy
- Installation of a site-wide CHP plant and centralised district water cooling (with heat rejection to the Nerang River) to reduce the energy demand of the precinct
- Installation of recycled water and rainwater collection systems to meet non-potable water demand
- Use of native species and vegetation community in landscaping of the public realm and enhancement of the marine environment
- Retention and showcasing of the cultural heritage of the area
- Use of the public realm to feature sustainable technologies and offer education opportunities for the public

The following quantitative targets have been set as minimum for the precinct:

- The greenhouse gas intensity of energy supply is at least 20% less than that available in a business as usual baseline
- Peak energy demand is reduced by 25% compared to a business as usual case
- 100% of irrigation for public realm is sourced from non-potable supplies
- 75% of the total annual storm water runoff is evaporated, infiltrated, or retained within the project site
- Less than 5% of the volume of storm water runoff is discharged untreated to receiving waters
- 60% of construction and demolition waste is recycled or reused
- All existing habitat areas are retained and enhanced
- Public transport is provided such that services are provided at least every 30 minutes during peak periods
- 40% of jobs created are serviced locally
- Community infrastructure is provided at a rate of at least $2,000 per residential dwelling or $16 per square metre for non-residential spaces

The Sustainability Report outlines further measures for future stages of the project that would assist in reaching the project objectives. Targets nominated in the strategy should be regularly reviewed, progress against these tracked, and the performance of initiatives monitored and reported against.

The next steps for developing and implementing the sustainability strategy include further development of the energy strategy (detailed design and further feasibility assessment of energy plant e.g. PV, CHP etc), investigation of the use of sustainable materials, investigating opportunities for ‘community food’ and more extensive stakeholder engagement.

12.7.6/ INTEGRATED WATER MANAGEMENT

The City of Gold Coast owns and maintains significant water, sewerage and storm water infrastructure that delivers water and collects and treats sewerage. The City of Gold Coast is in the process of finalising a Total Water Cycle Management Strategy which will be an overarching document that considers all elements of the water cycle in providing water, storm water and wastewater services to its entire servicing area. The Total Water Cycle Management Strategy is a holistic document that respects the function of each water cycle component and will guide the city to become more water sensitive.

In aligning with this strategy a site specific integrated water strategy has been developed specifically for the Gold Coast Cultural Precinct site. The proposed strategy looks at the site as a whole and develop opportunities for providing water, wastewater and storm water services. Specific aims of this strategy include:

- Understanding the change in demand that will take place based on the proposed staging of the development
- Exploring a range of site based servicing options and provide high level concepts of infrastructure requirements for each option
- Assessing how they best meet whole of water cycle principles and make a recommendation of a preferred future servicing option

The Integrated Water Management Report explores how adopting alternate water supply sources: recycled water, harvesting storm water runoff, treating wastewater, and abstracting groundwater, could help deliver these outcomes.

After quantitative and qualitative assessment, the preferred water strategy option is for all non-potable water demands (60% of the total water demand) to be met from the recycled water supply. Potable demands will be serviced with potable water supplied by Gold Coast Water. An on-site water treatment plant will be required to improve the water quality to a standard appropriate for irrigation, toilet flushing etc. It is recommended that this is constructed in Stage 2, when the bulk of the new landscape works are delivered. It could be expanded to provide additional treatment capacity as further stages of the development are constructed, and water demands increase.

This strategy achieves the best balance of life cycle cost and performance against qualitative criteria.

The space requirements allowed for in the Masterplan are: 300m² for the on-site treatment facility for recycled water and 1,500m² for bio-retention devices to treat storm water runoff. Additional space has been provided for a sewerage pumping station.

12.7.8/ GEOTECHNICAL

Arup has undertaken a desk study review of the key geotechnical aspects of the proposed masterplan.

Recommended additional ground investigation works include a combination of bore holes and test pits with associated in-situ and laboratory testing. This includes installation of monitoring wells across the site to monitor groundwater levels, as dewatering may be required where basement excavations are proposed. Recommendations include bore hole drilling at piled foundation locations, including fulfilment of the bridge design code at the Friendship Bridge. Where shallow foundations and excavations are proposed a combination of bore hole and test pits have been recommended. In areas of surface works and pavements, the Artscape, test pits are deemed sufficient. Advice has been provided, specific to each element of the Masterplan, however, the combined works are intended to provide adequate coverage of the site and understanding of the site wide conditions.

Laboratory testing including soil and rock classification, chemical durability and strength testing is suggested. Environmental testing comprising acid sulfate soil and contamination testing is also advised.

The proposed works and associated laboratory testing will inform material characterisation of soil and rock for use in geotechnical design, provide further information regarding contamination and material reuse and disposal and inform future treatment and costing.

Results from the recommended additional investigation works are to be used in the development of a detailed ground model, providing suitable design profiles specific to each proposed element of the project. This will inform the completion of geotechnical design calculations and further input to structural designs.
12.7.7/ FLOOD

The Gold Coast Cultural Precinct site is located within an extremely sensitive part of the Nerang River system which is prone to flooding, both catchment and coastal.

The Masterplan must comply with Council’s Planning Scheme requiring the development to result in:

- No afflux external to the site. Council require that their 20-metre MIKE21 flood model of the Nerang River system is the basis for confirming that this criteria is met.
- No loss in floodplain storage between Mean High Water Spring (0.66m AHD) and the designated flood level (2.9m AHD). This requires a calculation of the change in volume of earthworks between existing site levels and the proposed finished ground levels for the Q100 flood area.

A detailed flood study has been undertaken to assess the proposed development against the first criteria. During the initial stages of the study, it was identified that Council’s 20-metre MIKE Flood model may not adequately capture some of the intricacies of the proposed masterplan, and on this basis a refined TUFLOW model was built for the area around the precinct site, which enabled more accurate and rapid assessment of the proposed modifications to the site. The TUFLOW model was calibrated against Council’s MIKE Flood model.

The TUFLOW model for the 100 year ARI flood event was used to test a number of potential landfill options for the masterplan. These options included:

- Orientation of the Friendship Bridge
- Alterations to the topography around Evandale Lake
- Consideration of a channel/floodway to provide conveyance through the site

The flood modelling undertaken to date has informed the development of a Masterplan layout that is compatible with the planning scheme requirements to mitigate off-site flood risk. Further work will be undertaken to assess against flood storage criteria, and to confirm the afflux for a range of different flood events. The final testing will be undertaken using Council’s MIKE21 flood model.

12.7.10/ RIVERSIDE GALLERY MECHANICAL SERVICES

Arup has completed a high level assessment of the existing plant serving the Riverside Building to establish whether the existing mechanical infrastructure would be suitable for retrofitting for future use to serve a new art gallery.

Arup has completed a desktop review and site visit to further understand the functional characteristics of the plant and client requirements. Our review has concluded that to achieve the highest classification “AA” the following two options exists:

1. Decrease chilled water temperature from existing plant (where chillers are to be de-centralised to only serve the art gallery). All other plant served from this plant will need to be rebalanced to suit operating at lower flow rates. This is not recommended unless the chillers become dedicated to the Riverside Gallery.

2. Install a new dedicated low temperature chiller to serve the gallery space specifically. For classification “B” and “D” the existing chiller can be reused alongside a new air supplementary plant to provide humidification control to serve the art gallery space.

12.7.11/ ELECTRICAL & COMMUNICATIONS

The changing land use on the Gold Coast Cultural Precinct site will have a significant impact on the demands on electrical and communications infrastructure.

Arup has reviewed the existing electrical and communications infrastructure on-site, calculated the demands from each stage of the proposed development, and identified the required infrastructure to service these demands.

Two Energex high voltage underground cables enter the site, one from Bundall Road close to the main site entry and one from Crombie Avenue. It is likely that both cables may need to be relocated during Stages 2 and 3 of the site development.

There is currently 4,500kW of transformer capacity on the site; two 1,500kW units in the Arts Centre Substation 5G1,984 and one 1,500kW unit in the Riverside Building Substation 5G7,119. Additional transformers will be required for the proposed residential and commercial buildings. New high voltage cables will be required for this lead either as rings or spur feeds.

To supply a similar level of service as present, the existing backup generator supply should be sufficient until Stage 3, when additional generator capacity of the order of 1,275kW will be required for the Performing Arts Centre.

With the possible exception of the Arts Centre to Pimpama Tower microwave link, all the other communications links on-site will be affected by the proposed development. The most urgent consideration is the communications room which will be demolished with the Administration Building, along with a microwave link, the two mains fibre connections and a site copper and ISDN link.

12.8/ ACCESSIBILITY

Morris Access Consulting have conducted a Disability Discrimination Act & Accessibility Review of the Masterplan and provided a set of design principles to assist the project team not only to ensure compliance with the Disability Discrimination Act and Australian Standards 1428 series but also the principles of Universal Design. The report considers the Gold Coast Council Accessible and Inclusive Action Plan and provides a series of key recommendations for general consideration and then more specific recommendations in relation to the key built elements and features.

12.9/ BUILDING COMPLIANCE

PPL building surveys have undertaken a preliminary assessment of the Masterplan proposal. Their report schedules items that have been identified as regulatory items for consideration. Preliminary solutions have been proposed for each item. No outstanding Masterplan-level issues were raised.

FOR FURTHER INFORMATION ON THIS SECTION, REFER TO THESE GCCP MASTERPLAN SUPPORTING DOCUMENTS:
- Flood Modelling Report MP-ARFM-0100
- Electrical & Communications Report MP-AREC-0100
- Central Energy Plant Study MP-AREM-0100
- DDA & Accessibility Review MP-NMC-0100
- Building Surveyor Report MP-PLP-0100
- Riverside Gallery - Mechanical Services Review MP-AREM-0100
CULTURAL PRECINCT COMMUNITY INFORMATION SESSION, 7 NOVEMBER 2014, ARTS CENTRE GOLD COAST

Top: Michael Aird, Trish Newton, Joanne Driessens, Maureen Newton, Mark Cora, Kieran Chilcott
Centre: Criena Gehrke introducing the Gold Coast Cultural Precinct Information Session
Bottom: Paul Broadhurst, Jesse Judd, Howard Raggatt
FOR FURTHER INFORMATION ON THIS SECTION, REFER TO THESE GCCP MASTERPLAN SUPPORTING DOCUMENTS:

**12.10/PLANNING**

The Planning Report was prepared by Economic Development and Major Projects directorate of the City of Gold Coast, and covers adherence to relevant strategic and statutory requirements associated with the proposed Gold Coast Cultural Precinct. Strategic planning requirements for the Cultural Precinct have been reviewed and have resulted in proposed amendments to the new Gold Coast planning scheme (City Plan 2015). All statutory requirements are to be complied with to ensure that the design outcomes are delivered in relation to relevant Commonwealth and State legislation and the Gold Coast planning scheme, Local Laws and Policies.

**12.11/COMMUNITY ENGAGEMENT**

The Major Projects Team and the Cultural Development Unit from the City of Gold Coast supported Michael Aird as Indigenous Consultant for ARM Architecture to host a Cultural Precinct Community Information Session. The event was held on the 7 November 2014 at the Arts Centre Gold Coast, Panorama Room.

Representatives of the ARM Architecture Design team - Howard Raggatt, Jesse Judd and Paul Broadhurst - each provided an overview of the Masterplan development and Michael Aird spoke about the local Aboriginal history of the region as well as how the landscape has changed so dramatically over the past 100 years or more.

In general the comments and responses from the participants were very positive towards the proposed Masterplan of the Cultural Precinct. The event also provided a very beneficial networking opportunity between members of the Gold Coast Indigenous community and representatives of the City of Gold Coast as well of representatives of the arts, design and tourism industries.

**12.12/COST ADVICE**

Donald Cant Watts Corke has provided independent cost advice on the proposed Cultural Precinct, commissioned by the Gold Coast City Council. The design competition that concluded in October 2013 had a target budget of $305M to $396M. The design competition also captured a briefed gross floor area of 31,300m² (excluding car parking). These targets comprised the delivery of a complete Cultural Precinct under a managing contract procurement method including the interpretative and exhibition systems, audio visual and digital technologies, public art provision and furniture and fittings.

The ARM Masterplan has reconciled against these original targets with a gross floor area of 31,430m² and a budget of $399M*, demonstrated through these elements:

- Artscape and Stage 1 $63M
- Friendship Bridge $32M
- Art Tower $147M
- Performing Arts $157M

In summary, the independent cost advice has ensured the Masterplan has remained within the expected target budget.

* 2014 Dollars excluding escalation and GST