



ACSE NSW *Annual Awards*

CELEBRATING EXCELLENCE IN STRUCTURAL ENGINEERING

WEDNESDAY 2 DECEMBER 2020

DIGITAL PROGRAM



ACSE *Annual Awards*

WEDNESDAY 2 DECEMBER 2020

AWARD CATEGORIES

SMALL BUILDING PROJECTS

PRESENTED BY ACSE

MEDIUM BUILDING PROJECTS

PRESENTED BY STEPHEN NASH, AFS SYSTEMS

LARGE BUILDING PROJECTS

PRESENTED BY STEVE HODKINSON, PENETRON

UNUSUAL PROJECTS

PRESENTED BY JYANA MAREKO, XAVIER KNIGHT

FEMALE ENGINEER OF THE YEAR

PRESENTED BY SIMON GRAY, PLANNED COVER

EMERGING ENGINEER OF THE YEAR

PRESENTED BY ACSE

GOLD MEDAL AWARD

PRESENTED BY TIM HOGAN



ACSE *Annual Awards*

WEDNESDAY 2 DECEMBER 2020

RUNNING ORDER

6.30pm - Guest arrive & log in via Zoom

6.45pm - Official Proceedings commence

7.00pm - Building Categories commence:

**SMALL BUILDING PROJECTS
MEDIUM BUILDING PROJECTS
LARGE BUILDING PROJECTS
UNUSUAL BUILDING PROJECTS**

7.40pm - People Categories commence:

**FEMALE ENGINEER OF THE YEAR
EMERGING ENGINEER OF THE YEAR
GOLD MEDAL AWARD**

8.00pm - Peoples Vote Results

8.15pm - Official Proceedings conclude






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WEDNESDAY 2 DECEMBER 2020

SMALL BUILDING PROJECTS

1. **WHALE BEACH HOUSE - PARTRIDGE**
 2. **BALMAIN HOUSE - PARTRIDGE**
 3. **EXTRUDED HOUSE - SDA STRUCTURES**
- 

Whale Beach House

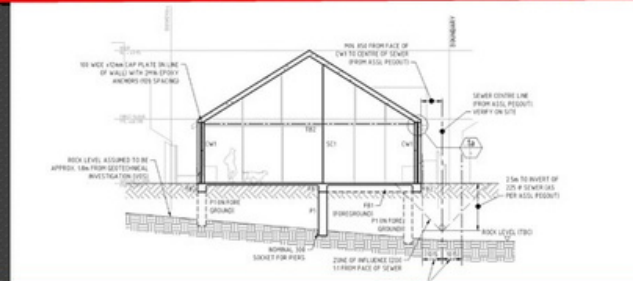
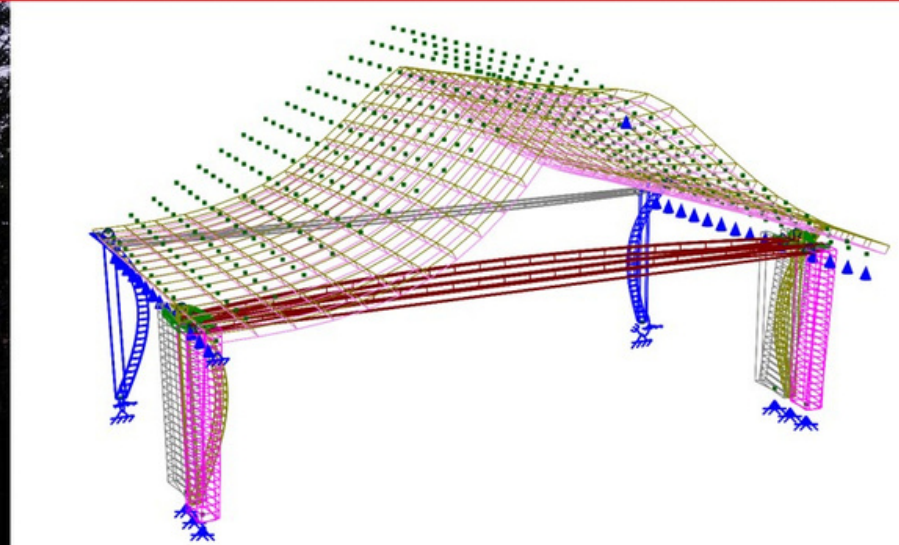


Balmain House



EXTRUDED HOUSE - INVISIBLE EFFICIENCY

SDA STRUCTURES



- Tied-arch system to pitched concrete roof as part of off-form extension, reducing roof slab thickness to achieve the architectural ideal
- Off-form nature by default leaves little opportunity to conceal the “tying” structure, so a resourceful approach to allowable structural zones had to be adopted



ACSE *Annual Awards*

WEDNESDAY 2 DECEMBER 2020

MEDIUM BUILDING PROJECTS

1. **KEN ROSEWALL ARENA REDEVELOPMENT - ARUP**
2. **SMALLS ROAD PUBLIC SCHOOL - SCP CONSULTING**
3. **JOAN SUTHERLAND THEATRE ACCESSIBILITY UPGRADE - ARUP**
4. **CAMPBELL'S STORES - TTW**
5. **WILDLIFE RETREAT AT TARONGA ZOO - TTW**
6. **ADAPTIVE RE-USE OF HMAS PLATYPUS - SDA STRUCTURES**

PROUDLY SUPPORTED BY

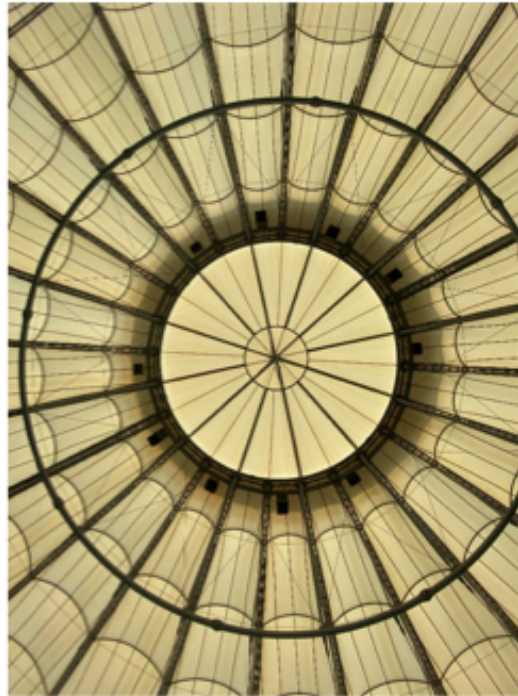


**smarter
permanent
formwork.™**

Ken Rosewall Arena Redevelopment

Sydney, NSW

- The Ken Rosewall Arena in Sydney Olympic Park has received a new **lightweight tensile roof structure** converting it into a multi-purpose, all weather facility to attract major sporting and cultural events.
- The selection of a self-resolving circular tension structure cleverly utilised the design basis of the original stadium. A new 100m diameter clear spanning roof was added with no additional foundations and minimal modification to the existing bowl structure, maintaining the integrity and beauty of the original Sulman Award-winning design.
- The project was conceived and delivered within a 12 month period.



Smalls Road Public School

CLIENT
NSW
Department of
Education /
Schools
Infrastructure

CONTRACTOR
Richard Crookes
Constructions

ARCHITECT
Conrad Gargett &
Collard Maxwell
Architects

**STRUCTURAL
ENGINEER**
SCP Consulting

CIVIL ENGINEER
SCP Consulting

**CONSTRUCTION
VALUE**
\$38M



**think differently
to design better**

- 3-storey circular concrete structure
- Large column free space and triple-height school entry
- Achieved structural completion in under a year
- Redesign converted an in-situ concrete scheme into an mostly off-site prefabricated scheme

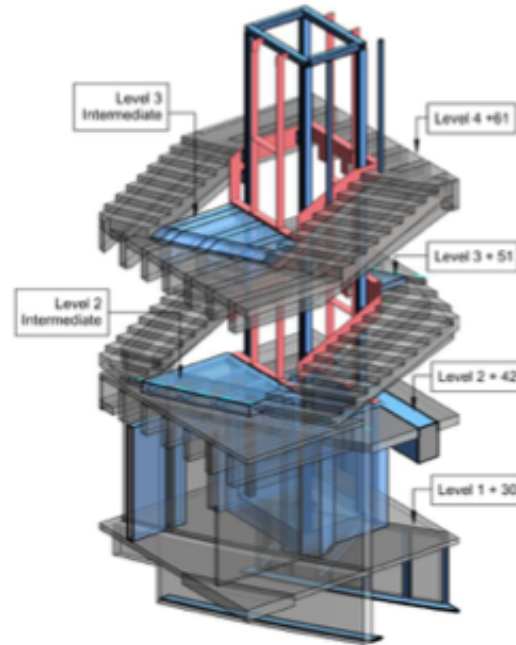


Joan Sutherland Theatre Accessibility Upgrade

Sydney, NSW

ARUP

- Providing structural engineering, facades and fire engineering expertise, Arup worked with the Opera House Renewal Building team and other specialists to provide accessibility upgrades to the Joan Sutherland Theatre. The works included a new lift in the JST Northern Foyer and a new passageway tunnel connecting the Southern and Northern Foyers.
- The upgrades have brought the theatre in line with current accessibility standards while conserving the heritage significance of this UNESCO World Heritage site.





Campbell's Stores

The Campbell's Stores is a superb example of mid-nineteenth century warehouse buildings, now rare in Sydney, and is a memorable, handsome landmark in the Rocks. Constructed between 1851-1915, the building was converted to restaurants in the 1970's and in urgent need of conservation.

The design concept was to reveal the original heritage fabric and to connect the building with the city, the Rocks and Foreshore. The scheme is organised around three 'public bays' including a through-site link to open up the building to the public for the first time. A contemporary overlay of circulation, amenities, rationalised services and flexible 'plug-in, plug-out' services in steel and glass have been sensitively inserted to the base-building for future adaptability and to enable ongoing conservation.

The redevelopment of this building has been successfully resolved amid significant existing archaeology and infrastructure constraints. The project goes beyond an opportunity to conserve the physical heritage fabric to interpret the rich early maritime and trade history of the city with great social and cultural benefit to both locals and tourists. This was a complete transformation of a prominent heritage site with complex design requirements and archaeological significance.



Client

Tallawoladah Pty Ltd

Architect

Johnson Pilton Walker

Structural, Civil & Façade Engineer

TTW

Builder

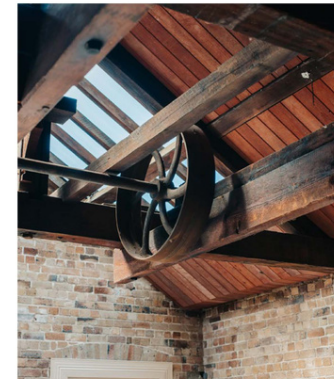
Buildcorp

Heritage Architects

OCP Architects and GBA heritage

Project Value

\$32M



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Wildlife Retreat At Taronga Zoo

Targeting to be one of Australia's first 5 Star Greenstar eco-retreat, the Wildlife Retreat at Taronga features a new native Australian wildlife sanctuary showcasing Australia's unique biodiversity.

Designed to integrate with the surrounding landscape, the retreat consists of 62 elegantly designed rooms, housed within five environmentally sensitive and sustainability designed lodges, together with the guest lodge, entry pavilion, and a separate restaurant building that links to the existing Taronga Function Centre. The lodges vary in height between two and four storeys and utilise load-bearing CLT (Cross Laminated Timber) walls and CLT floor panel framing, fully integrated with structural steel and in-situ concrete elements externally. The central guest lodge was designed with a composite glulam timber and structural steel framed roof, clad with zinc sheeting.

The built form creates a permeable environment with a variety of visual and physical connections. The lodges include landscaped "Green Screens" covering their northern facades and wrapping up over their roofs to camouflage the buildings and enhance the magnificent outlook over the animal exhibits focused on native Australian species, with Sydney Harbour, the Opera House, the Harbour Bridge and CBD skyline beyond.



Client

Taronga Conservation Society

Architect

Cox Architecture

Structural, Civil, Façade Engineer

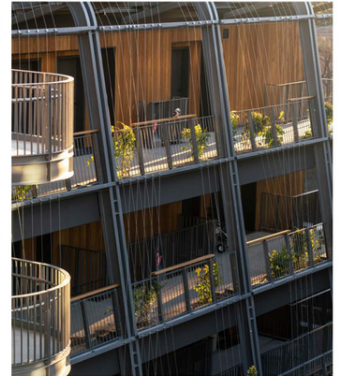
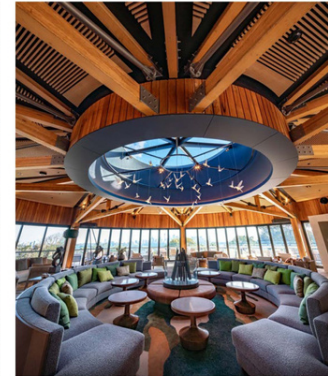
TTW

Builder

Taylor Construction

Project Value

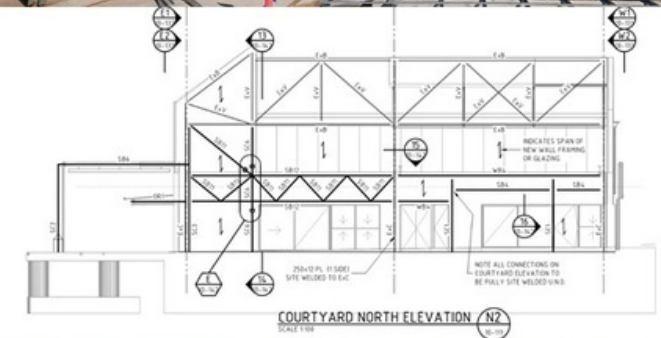
\$50M



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HMAS PLATYPUS – SLICED IN TWO

SDA STRUCTURES



- Adaptive reuse development in North Sydney. Former torpedo store industrial shed sliced in two
- Primary stability elements removed from centre of building to create a courtyard
- Minimal structural intervention to retain heritage of building
- New superstructure designed to tread lightly on existing footings to avoid groundworks in





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WEDNESDAY 2 DECEMBER 2020

LARGE BUILDING PROJECTS

- 1. BANKWEST STADIUM - AURECON**
 - 2. UNIVERSITY OF WOLLONGONG - ROBERT BIRD GROUP**
 - 3. BLACKTOWN HOSPITAL STAGE 2 - ROBERT BIRD GROUP**
 - 4. SYDNEY METRO NORTHWEST STATIONS - MOTT MACDONALD**
 - 5. SYDNEY COLISEUM THEATRE - TTW**
 - 6. PHOENIX ART GALLERY - TTW**
- 

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Bankwest Stadium

Parramatta, NSW

- New, world-class 30,000 seat rectangular stadium designed with spectators and the local community at its heart
- Steepest stands in Australia creating an unparalleled game day experience
- 1,200 safe standing positions (converting to 800 seats)
- 100% spectator coverage, clear sight lines

A stadium
for the people
built by the people
of Western Sydney.

aurecon



University of Wollongong Molecular and Life Sciences Building

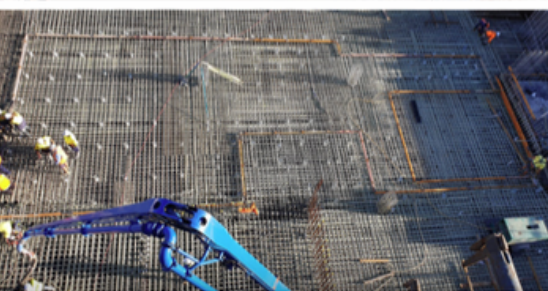
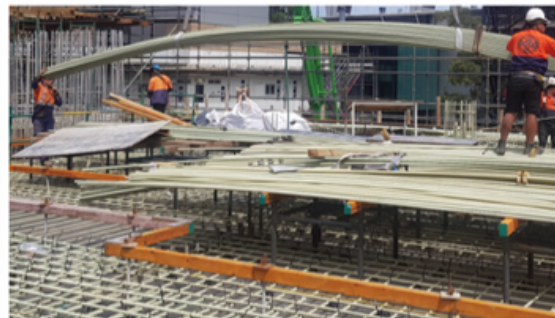
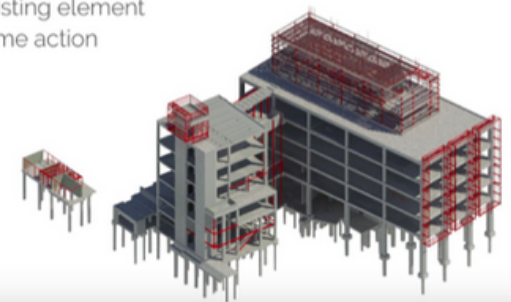
ACSE 2020 Awards Large Buildings Category

The Molecular and Life Sciences Building (MLS) project, located within the University of Wollongong University Campus, has been delivered to provide a world-leading science research facility to ensure innovation and education facilities are accessible at the university. Alongside the Molecular Horizons team, the building will also house the Centre for Atmospheric Chemistry, with research partners including NASA and ANSTO.

The project consists of two 5-storey buildings which are linked, landscape and public domain areas as well as the construction of a new link bridge to the adjacent IHMRI building. The building and its requirements are centred around housing state of the art Transmission Electron Microscopes (TEM), which are the most powerful in Australia and one of only 20 around the world. Their location on campus and surrounding structure materials were limited due to Electromagnetic Field Zones, and this drove final project solutions.

Key Challenges and Resolutions of the Project Brief included;

- Extensive use of GFRP reinforcement throughout the building to meet Electromagnetic Field requirements.
- Building becoming the first of its kind to use GFRP reinforcing in suspended slabs.
- Adoption of international code requirements due to lack of local use.
- Lateral stability requirements due to lateral resisting element locations/ductility of GFRP/combination of frame action and shear walls.
- Detailing of transition zones between N class reinforcement and GFRP.
- Programme accelerations and construction carried out with adjacent University buildings in use.



Blacktown Hospital Acute Services Building

ACSE 2020 Awards Large Buildings Category

The Blacktown Hospital acute services building was part of the Blacktown Hospital Stage 2 Redevelopment, providing world class facilities to Western Sydney. Delivered for Health Infrastructure NSW, the nine-story project was required to accommodate new ICU, emergency department and care services, medical imaging expansion, and new birthing wards.

The key structural features of the Blacktown Hospital acute services buildings include:

- Hybrid tunnel connections to existing buildings using soldier pile and contiguous pile basement walls, local mining and detailed stage sequencing.
- Nine floors with vibrationally sensitive post tensioned suspended flat slabs.
- Steel truss link bridge from Hospital building to new carpark structure.
- Steel atrium with suspended glass light well requiring seismic isolation to the stage 1 building.
- In-built flexibility for future expansion and construction of 2 floors during hospital operation.

Robert Bird Group (RBG) commenced the design in 2017, working with Jacobs Architecture and AW Edwards Construction to complete the project for opening in June 2019. This submission will outline the key design elements that made this project a success.



Sydney Metro Northwest Stations





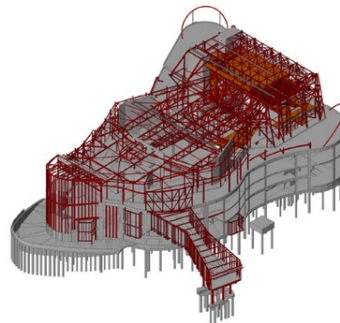
Sydney Coliseum Theatre

The Sydney Coliseum Theatre is a new multi-purpose entertainment complex located in the heart of Western Sydney. This unique and exciting venue will create a hub for the arts, culture and entertainment, bringing new flavour to the region.

The structure consists of a concrete frame up to level 2, with a braced steel framed structure over the auditorium, northern plant room and fly tower. The flowing façade comprises precast concrete panels to the primary plinth structure and lightweight cladding to the upper fly tower and auditorium, with a design inspired to represent aspects of a stage curtain. The auditorium has two levels of cantilevered balconies, a series of hung catwalks and forestage rigging platforms. The fly tower has two levels of fly gallery, a full grid, a loading gallery and a level of loft/head block beams. The structure is designed to cater for up to 80 flying lines and four panorama lines.

The unique design for this project presented several design challenges that required creative and out of the box engineering solutions such as the custom steel framing behind the precast façade around the northern nose of the building to provide lateral support adjacent to the quadruple height foyer space.

Client
West HQ
Architect
Cox Architecture
Structural Engineer
TTW
Builder
Hansen Yuncken
Project Manager
Maddison Property
Project Value
\$70M



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Phoenix Central Park

Phoenix is a multifaceted building with a performance space in one half and a private art gallery in the other, with the two halves connected by a central garden. As each half of the structure had its own architect, co-ordination between TTW, the architects, and the construction team was critical to the success of the project.

The five storey concrete frame was built with several inclined walls, including large voids, creating complicated load paths through the structure. Engineered with complex curves across the street frontage and through the centre of the building, an impressive 8m high double circular window sits in a compound curved masonry wall framed in structural steel.

This unique facility created further demands on the engineering such as numerous curved off-form concrete walls and soffits, and a large atrium with one of the galleries hanging from the slab above, and an elegant timber dome constructed within the performance space. The buildings and gardens are linked at many levels, above and below ground, allowing for an intense interlocking of performance, nature and art. Phoenix is a canvas for an open and changing art collection, music and yet to be conceived performance art. The result is a spectacular building.



Client

Judith Neilson

Architect

Durbach Block Jagers & John
Wardle Architects

Project Manager

Colliers International

Structural Engineer

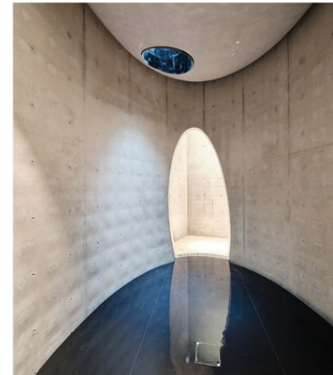
TTW

Builder

FDC Construction

Project Value

Confidential



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ACSE *Annual Awards*

WEDNESDAY 2 DECEMBER 2020

UNUSUAL BUILDING PROJECTS

1. **UTS CENTRAL SUNSHADES & OPERABLE LOUVRES - PARTRIDGE**
2. **PYRMONT BRIDGE STRENGTHENING - ROBERT BIRD GROUP**
3. **WYNYARD PLACE, SHELL HOUSE - TTW**
4. **POWERHOUSE AGORA - SDA STRUCTURES**
5. **THE RIBBON HOTEL, SYDNEY - TIE FLOORS - BONACCI GROUP**



XAVIER
KNIGHT

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UTS Central Sunshade and Operable Louvres





Pyrmont Bridge Restoration Project

ACSE 2020 Awards
Unusual Projects Category

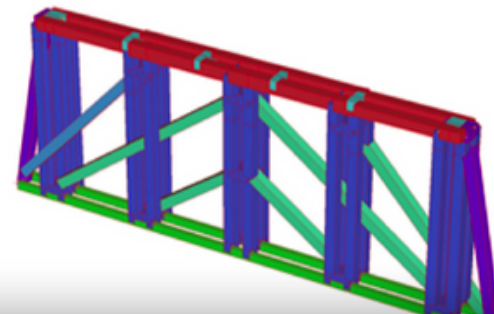
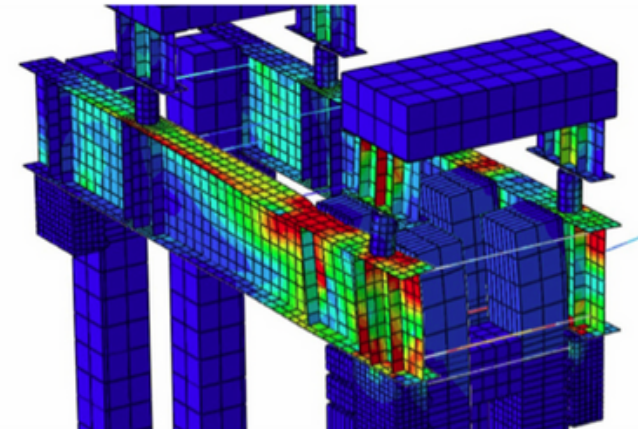
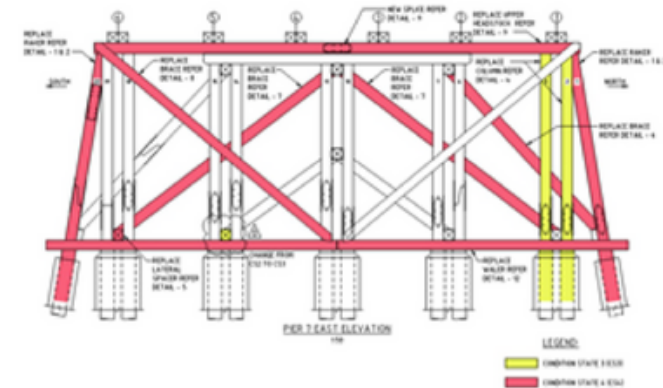
The historic Pyrmont Bridge commenced construction in 1899 and officially opened in 1902. The Bridge consists of 14 timber truss spans, each 25m long with a total span of approximately 370m. As part of the strategy to prolong the life of the bridge, ongoing maintenance included uplifting the bridge clear off its support.

RBG's design brief was to develop a construction methodology in collaboration with Waterways Construction (WWC) such that bridge pier sets could be 'de-loaded' to allow removal of Bridge structural elements.

Key challenges of the project brief include:

- The Bridge is to remain open to the public throughout the entirety of the works. This period would include times of very high pedestrian traffic, including ANZAC day and the Vivid Festival.
- Existing jacking equipment located at Pyrmont Bridge was adapted for reuse in the current project.
- Stability of the Bridge through all construction stages was to be demonstrated for wave, impact and wind loading.
- The construction methodology was to consider the permanent 'out of balance lean' of the Bridge.

RBG used a Strand7 construction stage finite element analysis of the Bridge to ensure the Bridge was stable and all structural elements remained within allowable structural capacities.

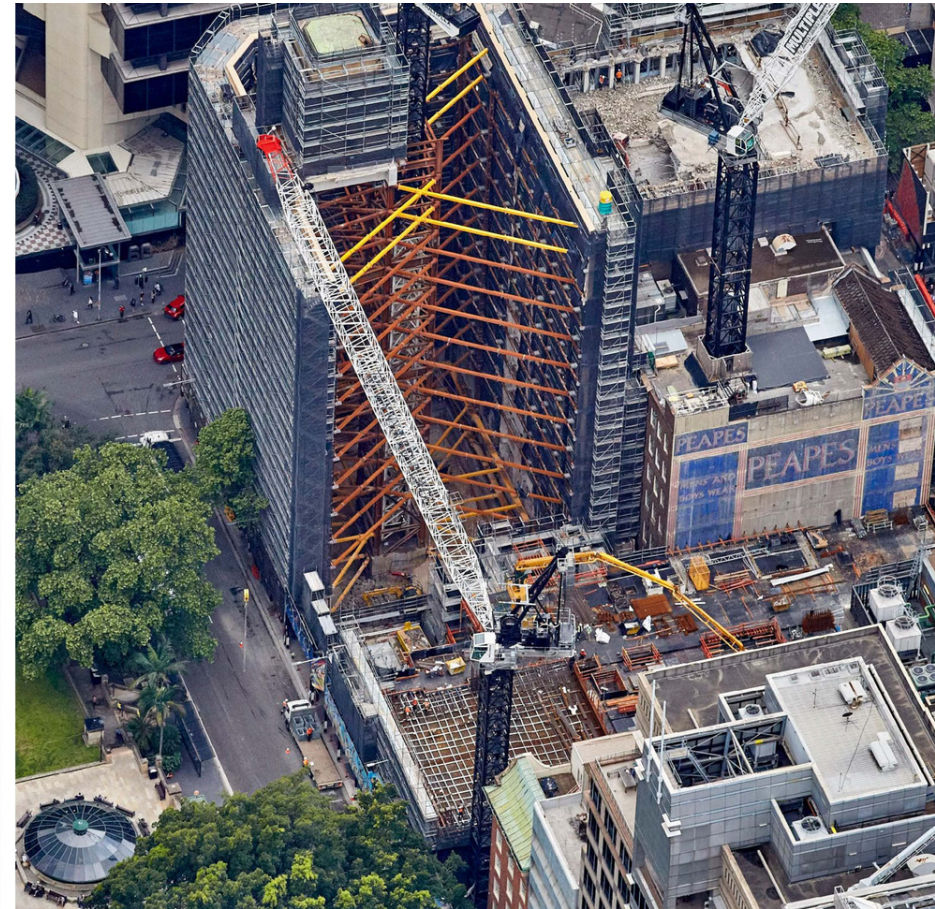
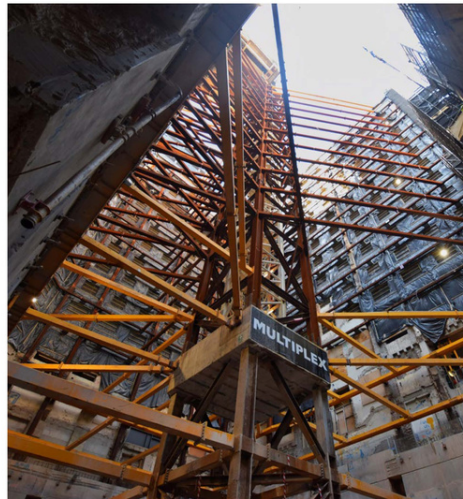




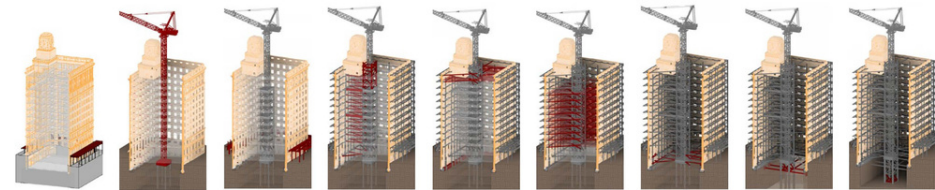
Shell House Brookfield Place

The Brookfield Place development consists of three projects: The Tower, a full demolition and rebuild and two heritage-listed buildings, Shell House and Beneficial House. Located on the corner of Margaret and Carrington Streets, Shell House is a State Heritage-listed building originally built in the late 1930s. It was the Shell Oil Company's southern hemisphere headquarters and is considered to be the finest of the series of buildings erected by the company in an Australian capital city. Shell House is a distinguished example of a "pre-skyscraper era" building and is dominated by the Gillett & Johnston clock tower, which became a Sydney landmark.

At 65.5m total height above ground level, Shell House is one of the tallest retained heritage façades in the world and certainly one of the most complex projects of its kind. The Heritage fabric of the façade and 400t clock tower in the heart of the CBD has been retained and restored for future generations through the advanced analysis techniques and ingenuity of the team involved in its delivery.



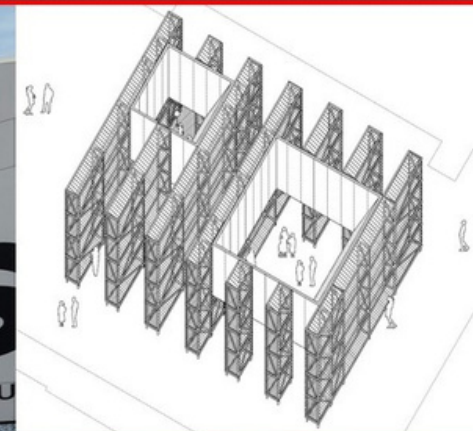
Client	Brookfield
Architect	Make Architects and Architectus
Structural Engineer	TTW
Builder	Multiplex
Project Value	Wynyard \$1B



Your Partner in Engineering

POWERHOUSE - AGORA - RECYCLED

SDA STRUCTURES



- 10 day temporary pavilion installation for Sydney Design Festival 2019
- SDA led a 100% recycle approach - making the project economically viable
- Over 3100 linear metres of standard 90 x 45 MGP10 – recycled into houses
- 5.4m high x 0.9m wide vertical cantilever timber truss colonnades
- Reduced wind design for 30m/s with safety strap down system on standby



The Ribbon Hotel – Tie Floors

Sydney, NSW

2020 ACSE Awards – Unusual Projects

Structural and Civil Engineers: Bonacci Group

Contractor: Grocon

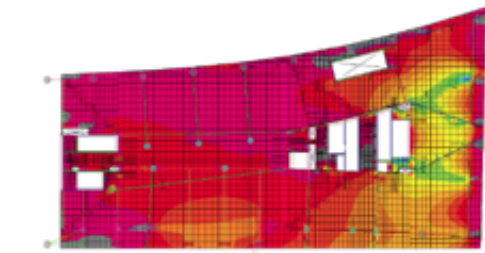
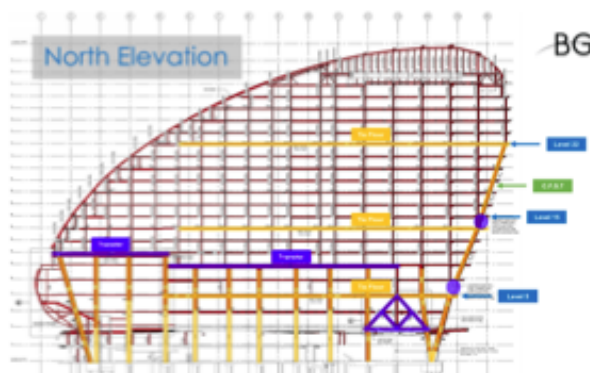
Architect: HASSELL / Ridley



The Ribbon Hotel project is the redevelopment of the Sydney IMAX Retail and Entertainment Complex. Bonacci Group were engaged to provide Structural and Civil Engineering services for the project and encountered some unique and unusual design constraints and challenges in order to achieve the unusual curved architectural form. The curvilinear shape required raking columns on both the east and west building envelope resulting in large lateral loads that were resolved via a strut and tie system.

The so called "TIE FLOORS" include the following:

- Three "strut and tie" floors on the eastern side of the building (Level 5, Level 15 & Level 22) cantilevering up to 27m
- Two steel transfer trusses spanning 35 metres above the IMAX theatre with raking columns
- Two steel transfer trusses spanning 30 metres above the hotel ballroom
- The strut and tie system used multistrand PT tie beams combined with RC struts formed with rolled steel "shell beams" used as lost formwork



ACSE *Annual Awards*

WEDNESDAY 2 DECEMBER 2020

FEMALE ENGINEER OF THE YEAR

1. **AUBREY BULLEN - ROBERT BIRD GROUP**
2. **RUBA TRIM - BONACCI GROUP**
3. **SIOBHAN TAPIA-SMITH - AURECON**
4. **EMMA BUIS - TTW**

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ACSE 2020
FEMALE ENGINEER OF THE YEAR AWARD

Aubrey Bullen

Senior Structural Engineer
Bachelor of Civil Engineering (Hons – 1st Class)

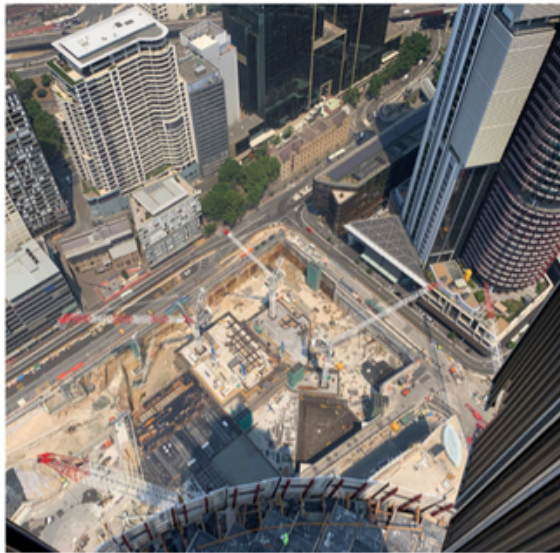
 **Robert Bird Group**
Member of the Surbana Jurong Group

Summary

- Chartered structural engineer with over seven years of consulting experience in Australia, The United Kingdom and New Zealand.
- Leads a team of structural engineers and technicians on the iconic One Sydney Harbour residential development in Sydney.
- Enjoys working with architects and the project team to develop innovative structural solutions for complex and architecturally significant projects.
- Strives to promote diversity in the recruitment process as the regional engagement committee representative for the Sydney office.
- Passionate about promoting engineering careers among young women as well as contributing to the development of the next generation of engineers.

One Sydney Harbour, Sydney

- Leads a team of engineers and drafting technicians to deliver two of the towers in this Sydney significant project, showcasing high-rise engineering.
- The tower form and architecture has led to tall and slender structures making one of the critical challenges the building movements under serviceability load cases.



Battersea Power station Development Phase 3, London

- Responsible for leading the complex interface between the portion of the Battersea Phase 3 development that is situated above a new Underground train station.
- Her contribution to this project laid the groundwork for delivering a package of work the client representative first thought was 'unbuildable', which is now approved and under construction.



Auckland Airport Pier B Extension, Auckland

- Responsible for the structural concept design of the extension to an existing steel-framed terminal building.
- The design balanced flexibility for future planned extensions while minimising modifications and disruptions to the existing structure.

Ruba Trim

2020 ACSE Awards – Female Engineer of the Year Nominee



Associate Structural Engineer
BE (Civil), MIEAust

About Ruba

Broad range of structural analysis knowledge and multidisciplinary leadership; especially in leading her team through the design of complex structures.

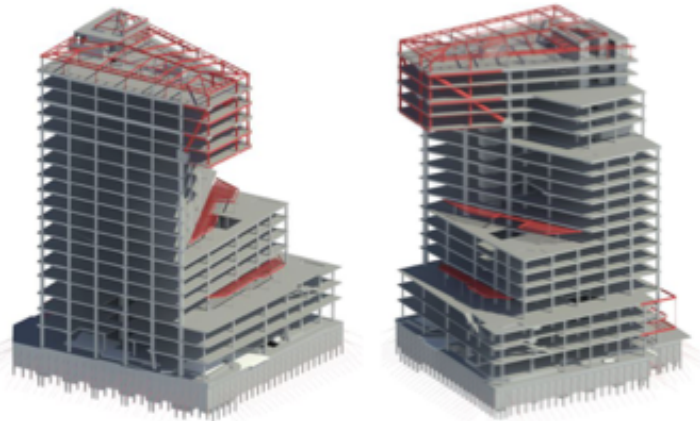
Currently the Project Lead for projects such as **Western Sydney University Bankstown City Campus Development**; **Picton High School Redevelopment** and **Edmondson Park Residential Precinct Development**.

Part of Bonacci Group's Women in Engineering and Construction workshops and a mentor to an undergraduate female engineer who has recently joined, working with her to ensure her goals are met and opportunities to develop her career.

Approach in the workforce is to ensure equality amongst all. Does not believe there should be a delineation between professionals of different race, religion, gender, etc., and hopes for the day that there is no longer a "Female" Engineer of the year award.



Aerial of Edmondson Park Residential (\$280m)



WSU Bankstown City Campus Development (\$260m)



Picton High School Redevelopment (\$100m)



Women in Engineering & Construction Workshop

Siobhan Tapia-Smith

Associate, Structural Engineer



aurecon

- Leads a large and diverse portfolio of work across Sydney Airport, data centres and education
- Holds several leadership positions both in Aurecon and the broader engineering community. This enables her to be part of the company's strategy and have a meaningful influence on issues that will improve the engineering profession
- Has included herself in every opportunity available to be a role model and support diversity and inclusion

Siobhan's vision is to help build and nourish a workforce and industry that **respects, encourages** and **values** all its employees regardless of their gender or perceived 'difference'.

TTW



“ As a recognised professional in the construction industry, Emma offers the resilience of a studious and conscientious Engineer. Emma endorses a proactive and obliging nature working with stakeholders delivering a service ranging from clients, design consultants and construction teams.

The tenacity Emma has shown in such a short time frame working together only further exemplifies my confidence in offering this statement of support. It is without reservation that I offer this recommendation for such a prestigious award.

Stephen Walker
St Hilliers Property

Emma Buis

Career + Leadership



- Strong leadership, collaborative work approach and project management skills earned her the position as structural lead on the current \$463million Pitt Street Metro Station project.

“ As the structural lead on Pitt Street Metro Integrated Station Development, Emma's collaborative approach to the design development has been invaluable in a large project office environment. Emma inspires the engineers around her to continually improve including through her advocacy for professional engineering chartership.

Glen Fowlie
Director TTW

Contribution + Diversity



- Chartership management
- NAWIC mentor 2019 & 2020
- TTW Mentoring Program
- TTW Young professional Development Group
- Established a series of presentations for the schools and universities that have been engineered by TTW

Adversity + Challenges



- Overcame challenges such as; childhood rural environment where opportunities for women were limited and a male-dominated industry
- Committed to creating an inclusive environment for staff
- Revamped TTW's annual bring your dog day to "bring your dog any day"

Your Partner in Engineering



ACSE *Annual Awards*

WEDNESDAY 2 DECEMBER 2020

EMERGING ENGINEER OF THE YEAR

1. NICHOLAS SMITH - ROBERT BIRD GROUP
 2. RISHELE LU - SCP CONSULTING
 3. JEFF CHEN - AURECON
- 



ACSE 2020
EMERGING ENGINEER OF THE YEAR

Nicholas Smith

Nicholas Smith is a structural design engineer based in the Robert Bird Group Sydney office:

- Nick has accumulated 5 years at RBG when combining undergraduate and post-graduated industry experience.
- He graduated from the University of Technology Sydney in 2017.
- Tertiary engagement is a focus for Nick, attending careers fairs and facilitating University research projects.
- He is an active member of the Sydney Bluebeam User Group.
- Nick returned to UTS in 2019 where he is studying a Bachelor of Computing Science majoring in Data Analytics and Artificial Intelligence. Having just begun his second year, Nick continues to work and study full-time.

 **Robert Bird Group**
Member of the Surbana Jurong Group

Crown Hotel Resorts Sydney

- Nick has been involved with this iconic project for the past 4 and half years. He is now the lead structural engineer managing the design delivery, construction and commercial aspects of the project.
- Leading a team of engineers and draftspersons they have delivered all 70 levels of slab design.
- Managed the challenges that the unique top down construction presented.
- He has played a pivotal role in the on-going coordination process. Displaying leadership when collaborating with the services and consultant teams.

Engineering and Technology

Since entering the industry Nick has become passionate about evolving the way we work.

- Developed a company work practice to standardise electronic mark-ups.
- Implemented a paperless site inspection workflow.



The Future

Nick hopes his determined pursuit of engineering excellence will allow engineers to shape the world around us. Harnessing the power of data to improve all areas of the industry in creating a sustainable future and push boundaries of what possible.



Rishele Lu

Structural Design Engineer

- Dedicated to learning, mentoring and support
- Recognised as potential future leader at SCP
- Passion for challenging building designs
- Plans to oversee graduate training programs

**knowledge is
most powerful
when shared**



Australian National University (ANU)

Lead engineer delivering the project through to completion. Added value through using precast core walls and columnform to speed up the construction timeframe.

Recognised by the construction team for her strong design and project management skills.



Cranbrook School Redevelopment

Designing and detailing multi-strand post-tensioning core walls to retain the lateral loading from the surcharge of 101-year-old full brick heritage building and a 42m-long double floor steel truss with hanging floors to create clear space for a multi-purpose sports hall.

Jeff Chen

Structural Engineer



aurecon

- Graduated from UTS with a Bachelor of Engineering (First Class Honours) in 2017
- Recipient of the UTS Pathway Scholarship and also received the Outstanding Graduate Prize
- Fluent in Cantonese, English and Mandarin
- Completing part-time postgraduate MEngSci program (Structural Engineering Stream) at UNSW, expecting to graduate in 2021
- Key projects include: Pitt Street Metro Integrated Station Development Project, NEXTDC S2 and NEXTDC S3 in Sydney





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GOLD MEDAL AWARD

PRESENTED BY
TIM HOGAN,
2019 GOLD MEDALIST



GOLD MEDAL AWARD WINNER

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