

# Subtropical Futures: Victoria Park Re-imagined

Master or architecture student design studio urbanising an inner city golf course between a major university and the largest public hospital in Queensland

The Victoria Park Re:Imagined project is a response to a provocative idea championed by the Queensland Government architect, Malcolm Middleton. He has called for a rethink of the future of an inner urban golf course between the two major urban institutions of the Queensland University of Technology (QUT) at Kelvin Grove Campus and the largest hospital, the Royal Brisbane and Women's Hospital (RBWH) in Herston, less than two and a half kilometres from the centre of Brisbane. While this presents a great design challenge, the idea fits with the broader question of the way we need to look at the future growth of Brisbane.

Brisbane is a coastal city 27.5 degrees south of the equator. It is situated on the Brisbane River, one of the largest rivers (and floodplains) on the east coast of Australia. The river defines the city and gives it its name. The river has been a natural place to accommodate population growth for the city. High-density development has capitalised on the natural amenity, a string of parks, walking paths and cycle ways, as well as proximity to the city centre. The major floods of 2011 and the scare of 2013 have seen a more malevolent aspect of the river and shift of thinking on its role within the city. The floods have made council, for the first time, acquire prime development sites near the river with approvals for high-density development and made them parks, at significant cost.

However, the pressure for population growth in Brisbane remains. 140,000 new dwellings are anticipated to be required by 2031. Redeveloping the dwellings in the historic inner urban areas of the city, which has given Brisbane its distinctive subtropical character remains difficult and engenders community concern. Brownfield sites are less plentiful so there should be an imperative to review the role of other strategic locations in the city, especially those away from the river on higher ground and steeper slopes.

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Figure 1: Victoria Park Site, walkable catchments for bus stations

Some of these places are currently open spaces and their development could raise revenue to acquire land in lower more flood prone areas for more riverside parkland. This could form the basis of the restructuring of the city to respond to future climate change events.

Victoria Park Golf Course is one such open space and is possibly the most strategic development opportunity for the city, so the interest of the Government architect is well founded. It sits on a high ridge line just north of the city centre and is one of the few remaining golf courses close to the centre of an Australian capital city. While it is a public course and a valuable community asset, it has been compromised by the recently completed northern bus way and the two bus stations constructed on its edges.

Victoria Park is bounded by two major community facilities served by the bus stations, the QUT to the west and RBWH at its northern end. Both are significant community focal places and large employers and each has expanded in recent times. The QUT has grown westward into a new medium rise mixed-use precinct, the Kelvin Grove Urban Village. The RBWH has grown upwards on a very constrained site with a suite of distinctive laboratory buildings along Herston Road opposite the golf course site. There is also a recent master plan for the hospital precinct to become more of a knowledge precinct. This sets up a significant design challenge for students to address.

The idea of a subtropical urbanism is extremely relevant. South East Queensland is strongly identified as a subtropical region. The State Government's South East Queensland Regional Plan 2009-2031 stated typical aspirations for being liveable and prosperous but also called for the subtropical character of the region to be recognised and reinforced.<sup>1</sup> The current City Plan by Brisbane City Council advocates that the living environment is to be human in scale, with a sense of place based on the city's subtropical character. It continues to state that the emerging denser forms of development are to blend with traditional 'timber and tin' buildings and have a strong relationship with the Brisbane River.<sup>2</sup> These two notions point to the inherent contradiction of growth for Brisbane. To accommodate significant new dwellings within current city boundaries, it is unlikely to be found in replicating the lower density the timber and tin architecture of the traditional houses. The 2011 floods will push development opportunities away from the river.

The School of Design at the QUT has embraced the idea of subtropical design and subtropical urbanism with the establishment of the Centre for Subtropical Design in partnership with the BCC in 2003. The Centre's seminal publication *Subtropical Design in South East Queensland* provides a comprehensive guidance for planners, developers and decision makers.<sup>3</sup> These factors have provided a remarkable framework for design enquiry.

## THE APPROACH

This question has been investigated as a conjecture in the Master of Architecture program in the School of Design at the QUT, taught as a year long project within the design studio. The QUT has recently changed its approach to the role of professor within the school by appointing three practitioners to share the vacant professor's role. For the rest of the week, they continue working in practice. Their main teaching responsibility for the

professors is in the Master of Architecture program in the final year design studio. Each professor chooses their own project and students are able to choose who to work with. An aspiration of the school is for the studio to reflect issues of practice appropriate for a final year of a masters program. So the students are seen as young practitioners as much as students.

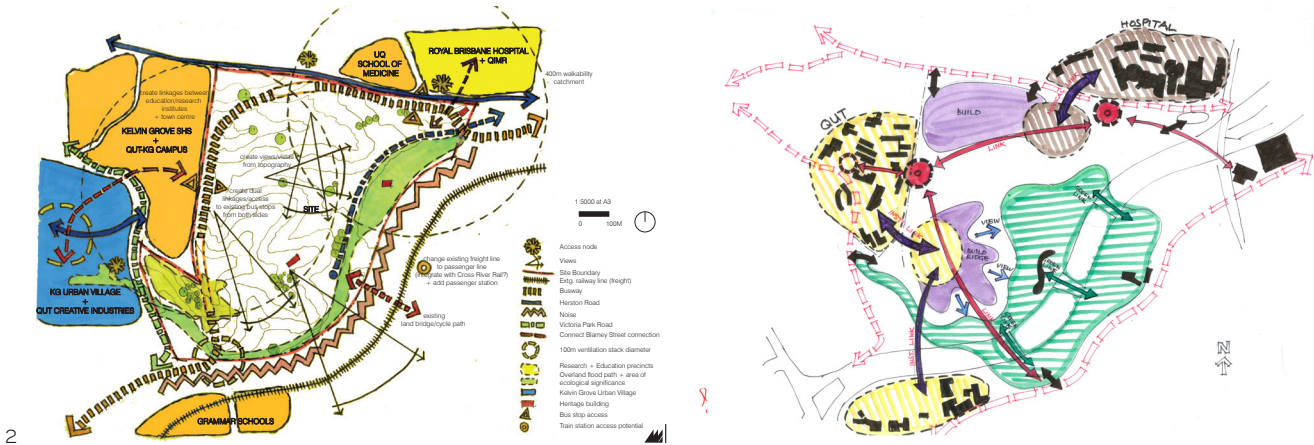
While new to the role as professor, the writer taught in the UK at Hull School of Architecture for two years more than 20 years ago and has run design studios in architecture and urban design intermittently for the QUT over the last 20 years. Registration as an architect and a master of urban design combined with extensive experience with urban design in addition to architecture has provided a strong platform from which to lead this project. My involvement with the Centre for Subtropical Design at the QUT since its inception and being chair the board for three years has elevated the interest in a subtropical urbanism.

The project and the way it has been structured brings together these broad interests and responds to issues about the knowledge and underpinning philosophy of architects and the way architects work. The School of Design study guide for the master studio states that projects should have a focus on problem based learning experience that engages with advanced architectural design issues. Emphasis is placed on design exploration and outcomes that embrace and integrate all areas of architectural concern. Victoria Park provides the perfect platform to test these ideals.

An urban scale project is therefore appropriate for the final year of the course and reflects the area of work that will be a major focus in the professional lives of new graduates. They will need to deal with issues of the city and how individual buildings and projects can contribute to make urbanism. This especially applies to hospitals and universities that are often seen as campuses remote from the city by those that run them and often the specialist architects who design them. Graduates will need to be able to embrace density, how people will live closer together in taller buildings within the subtropical climate.

To better engage with the city and urbanism, architects will need to refocus the way they practice. By their nature, urban design projects are collaborative design exercises where the architect has just one role in the broader design team. While architects are creative people with much to offer, they are not known for their ability to collaborate with others, a lament often expressed by many allied professionals. While this is a generalisation, architects tend to believe in the importance of their own ideas (and themselves) above all others and convince others of their worth. This can be a reflection of the design and crit process at architecture schools where you stand up and defend your own work. So the students had to work in groups and had to prepare a collective scheme.

Architects should also have more awareness of urban design and greater levels of skill as urban designers. Much urban design work produces plans and documents that are implemented by others. Instead of selling a project, this requires the designers to more clearly articulate the values, strategies and design ideas that underpin the solution. A shift of mind set is needed away from a unique design response to a framework to inform and inspire appropriate action. The first semester was the master plan for the project.



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The project presented a particular view of urbanism that the students had to use as a starting point. The underlying premise and organising idea for city making is an urbanism made of relatively regular urban blocks. The purpose of blocks is the typical historic approach to create parcels of land as sites for buildings that could be developed over time, as well as creating their address i.e. their place in the overall settlement. The blocks then are arranged to frame streets and public spaces, including significant open spaces, in a rich sequence and pattern to acknowledge routes of movement, the location of major focal places and site features.

These ideas are evident in the famous Nolli Plan of Rome from 1748, the first figure ground drawing, where the urban blocks drawn in solid black reveal in white the streets and squares as well as the interiors of public buildings. The strong relationship between block pattern and the framing of the public realm is clearly demonstrated. The idea of a rich urban sequence acknowledges the serial vision ideas of Gordon Cullen in his seminal work, *Townscape*.<sup>4</sup>

Innovation is one of the mantras of the architecture profession, but a striving for newness can engender a disregard for the efforts of those who have gone before us, except for the heroes of the profession. Design is then seen as exploring new technologies or cultural commentary and a critique of the city. This can result in a focus on an idealised building form of a stand-alone object, not as a response that contributes to and reinforces existing (urban) places. So the students had to learn from the existing cities and demonstrate how this research influenced design responses. Students researched urban blocks and urban spaces both locally and from overseas and measured and recorded the sizes of these blocks. From this research, they had to make judgements about the appropriate size of an urban block suitable for a subtropical urbanism. They used these parts of other places as urban tissues, to prepare preliminary concepts. While this can be a controversial approach for those who see innovation as the driving force of creativity, it is a fun way to get better knowledge of the scale of urban places and come up with unexpected design ideas.

Another philosophy that informed the project was the idea that there is a DNA evident in urbanism, so the plan from one place can suggest surprisingly good design responses elsewhere. It was hoped that this interweaving of scenarios would produce a framework for learning and design excellence.

Figure 2: Victoria Park site analysis, linkage opportunities, Meta Collective, Red Thread

	STREET PATTERN	GRID	BLOCK SIZE	ORIENTATION TO PRIMARY STREETS	CENTRAL HUB	ORIENTATION POINTS	MIXED USE	LAND USE MIX
Curitiba, BRAZIL		loose grid	100 x 81 8.1 Hectare	parallel to primary	square with transit station	horizontal	horizontal	RETAIL OFFICE RESIDENTIAL L HO TEL OTHER
Barcelona, SPAIN		square grid, truncated corners	113 x 119 1.2 Hectare	parallel to primary	square boulevard	vertical	vertical	RETAIL OFFICE RESIDENTIAL L HO TEL OTHER
Manly, SYDNEY		rectangular grid/shaped by natural elements	100 x 200 2.2 Hectare	perpendicular to primary	pedestrian mall	pedestrian mall	horizontal	RETAIL OFFICE RESIDENTIAL L HO TEL OTHER
Florida, USA		rectangular grid	170 x 175 1.2 Hectare	perpendicular to primary	boulevard	boulevard	horizontal	RETAIL OFFICE RESIDENTIAL L HO TEL OTHER
Santa Barbara, USA		irregular grid	120 x 120 1.2 Hectare	parallel to primary	main street	street	vertical	RETAIL OFFICE RESIDENTIAL L HO TEL OTHER
Milan, ITALY		irregular grid	135 x 100 1.25 Hectare	parallel to primary	main street	main street	vertical	RETAIL OFFICE RESIDENTIAL L HO TEL OTHER

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## THE PROJECT

The essential premise of the project was relatively simple to articulate. Students had to re-imagine Victoria Park as a new city parkland and an urban place that made a connection from the QUT to the RBWH. This new urban precinct would be a medium to high-density transit oriented development that capitalised on the two bus way stations and the proximity of the university and hospital. The design needed to understand the context and features within the surrounding area, respect and respond to site features, especially topography and embody and define principles of a subtropical urbanism.

## THE PROCESS

Students self selected the groups to engender a greater commitment to the group work. They were asked to create a name for the group and act like a practice undertaking the project. Although these were final year students, the expectation was they would need guidance given the scale and complexity of the project. They were led through a clear process of research, synthesis, design options preparation and selection. Expectations were very clear with examples from similar projects shown. Identifying and describing the strategic ideas that underpinned a scheme were emphasised.

Guest lectures from friends and colleagues (who were not paid) included urban designers, architects, landscape architects, a traffic and transport engineer, a housing market researcher, a development manager for a large developer and an engineer/project manager. Half way through the semester, before the interim crits, the studio was conducted as a three-hour sketch with a one hour pinup and critique afterwards. The purpose was to finalise one or more options. Practitioners from industry including the Government Architect joined each group and acted as mentors. This is an old fashioned idea, with an emphasis on quick and decisive strategic thinking and drawing. There is nothing like a short deadline complete work. The final crits had about eight different practitioners from industry. In all, about \$10,000 of volunteer time from the profession has been contributed to the studio.



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Figure 3: Urban block analysis, GSP group.

Figure 4: Three hour sketch and government architect mentoring a student group.



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Figure 5: Final Master Plans, Red Thread, MAAD, GSP, Spacecraft, Front 5.

**TEACHING OUTCOMES**

Working in groups is not easy, but has significant teaching benefits. Each group had to submit a combined piece of work, but there was opportunity and a requirement for individual contributions within the collective framework. The group approach provided a forum to discuss and debate work with colleagues and work together for a common purpose. The group work encouraged a strong commitment to the project, strong attendance in the studio and important experience in negotiating design responses with colleagues. Ultimately the process produced better work than was possible individually and learning was enhanced. Most importantly, the experience was fun and the sense of belonging to the group enhanced the collective experience and celebrated the final year of study.

**DESIGN OUTCOMES: A SUBTROPICAL URBANISM?**

The final submissions were all credible proposals that were professionally presented. Schemes had similarities, but also significant differences. All proposals created significant parks with strong edges to urban areas. Some parks had areas that were more contained within the urban pattern. Green corridors through the precinct formed strong vegetated connections to areas beyond the site, including over the transport infrastructure to the south.

The strength of the bus station locations on the northern part of the site established the strong east west street grids and blocks. The southern portion of the schemes had more differences, with a variety of grid geometries in a more fragmented form. Some followed ridge lines more closely and kept away from the steeper land. The nodes were urban in character with good visual containment, but also had a strong proximity and views to the park from some locations within the node. Quite a few schemes incorporated water and wetlands on the lower land.

One of the schemes by Meta Collective developed a compact design that defined a generous park with a regular shape. The plan was organised with two grid geometries. The northern portion of the site angled the street grid to create a direct link between the two bus stations. The central existing function centre was incorporated within a continuous park that maintained the connection from the green areas in the south to the residential areas across Herston Road to the north. The southern grid had more of a north south orientation running parallel to the site boundary and bus way. The two grids interacted on the water course and the resultant street made a direct connection between the park and the QUT bus station plaza. With this arrangement, most streets ran close to east west to enable as many sites as possible to have a northern orientation.

The built form was relatively medium rise up to nine stories, a scale that more readily facilitates single loaded apartment planning with cross ventilation and natural light from both sides of the apartment. Nine stories is also a quirk of the building regulations that require higher degrees of fire escape and fire safety above heights of 25 metres, which adds costs.

Certain themes reinforcing ideas for a subtropical urbanism have emerged from the student projects. Blocks were small scaled up to about one Hectare in size, enabling good walkability. Streets were wide enough to accommodate significant street trees with some streets more designed as a



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green way rather than a street. Many streets had open vistas to green, creating an openness and relationship to landscape, valued principles of subtropical design.<sup>4</sup>

Built form was more a collection of individual, albeit larger, buildings with gaps for ventilation and pedestrian access. This fragmented form still addressed streets and public spaces. Walkways through blocks added choices of routes and richness to the pedestrian experience. Vegetated

Figure 6: Final master plans and axonometric, Meta Collective.

*areas within blocks were often visible from the street. Buildings were also setback from the streets to enable deep planting where mixed-uses were not required.*

#### **WHAT NOW**

The work of the following semester focuses on the implementation of a synthesised single plan based upon the best student ideas. Smaller groups of students are allocated a block or two and will combine to design every building on the site, 70 or so in total. Students will design more than one building, similar buildings within different contexts and orientations, as well as a detailed element of the scheme, an office floor, café, public space, etc.

Students will need to negotiate interfaces across side and rear boundaries and across streets with colleagues. They will need to resolve issues of overall character and ideas about urban grain and architectural expression. Like the first semester, this should be challenging but fun. By the end of the academic year, the all buildings for this new community will be designed. Ultimately, the entire project will be put into a games engine, so the entire virtual world can be experienced in real time.

The studio has been a success with strong positive feedback received. Some students have expressed their thanks in writing and expressed an interest in pursuing urban design in the future. The project and the way it has been run has provided rich experiences to learn from the tutors, practitioners from industry and importantly each other for those completing an architecture program at this challenging time.

#### **ENDNOTES**

1. Queensland Government, 2009, *South East Queensland Regional Plan, 2009-2031*,
2. Cullen, Gordon Cullen, 1961, *Townscape*. Reinhold Pub. Corp.
3. Brisbane City Council, 2000 *City Plan 2000*,
4. Kennedy, R, 2010. *Subtropical Design in South East Queensland*. Centre for Subtropical Design, BCC/QUT.