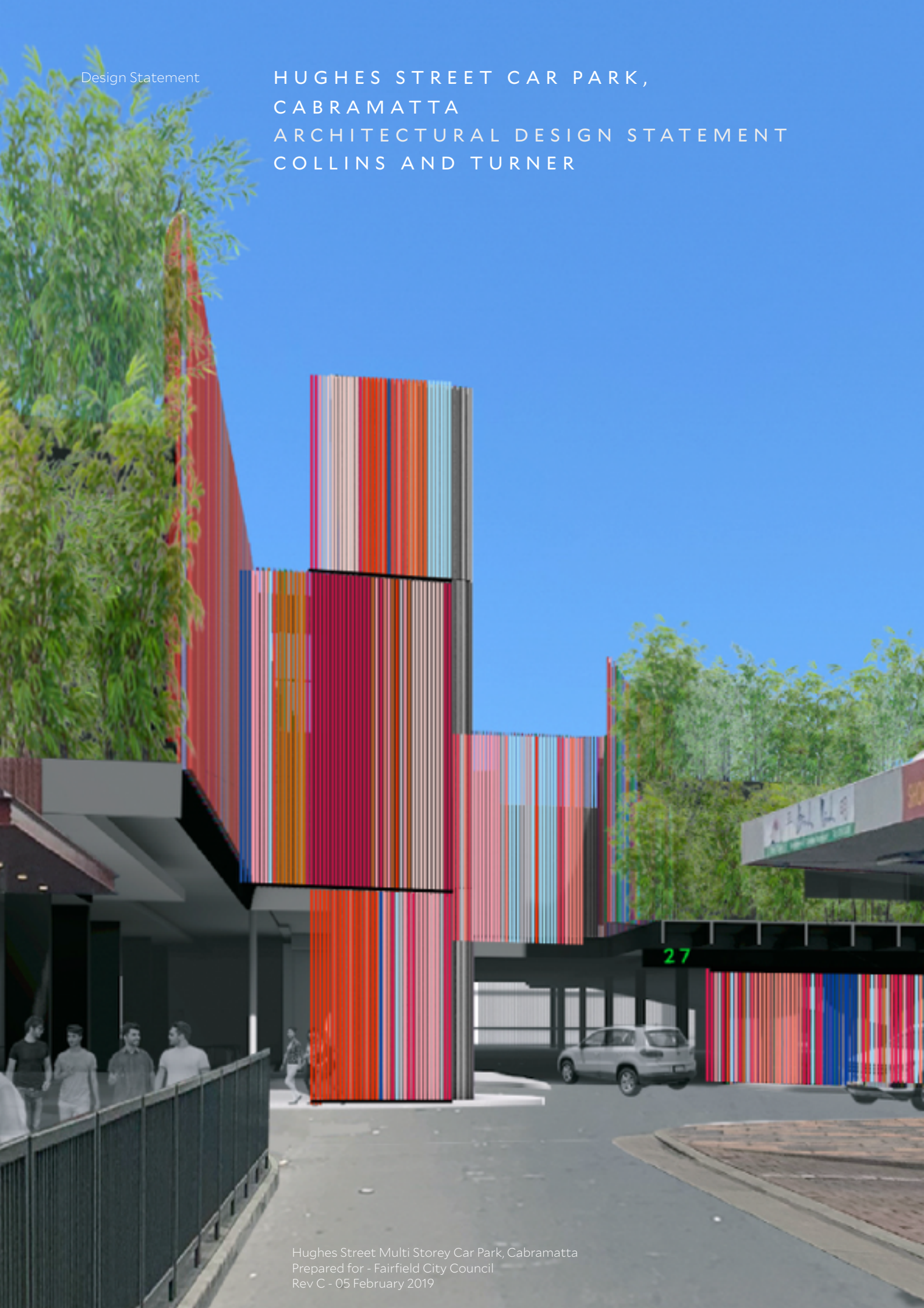
HUGHES STREET CAR PARK, CABRAMATTA
ARCHITECTURAL DESIGN STATEMENT
COLLINS AND TURNER



Hughes Street Multi Storey Car Park, Cabramatta
Prepared for - Fairfield City Council
Rev C - 05 February 2019

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1. INTRODUCTION

1 PROJECT AMBITIONS

This project aims to support the demand for parking spaces in Cabramatta city centre, allowing convenient access to the surrounding commercial retail development. An on-grade car park is currently located on the subject site with spaces for commercial delivery vehicles and public car parking. Currently, the site allows for approximately 776 paid car parking spaces and 68 timed parking spaces.

The proposal aims to provide SRV parking for commercial delivery vehicles, and public car parking on the ground floor as is currently available. Aesthetically the project contributes to the rich cultural fabric of Cabramatta and is sympathetic to adjoining developments in bulk and scale. Also proposed are changes to both the surrounding road network, the internal circulation of the two existing car parks, and Dutton Lane loop surrounds the car parks.

Key to this project is pedestrian safety and user experience. This statement outlines improvements in safety and interconnection of the three town centre car parks as well as the popular rear lane shopfronts fronting Dutton Lane.

While this proposal is for a new car park to meet the existing town centre parking demand, the associated improvements outlined in this statement will improve Dutton Lane and Dutton Plaza, Dutton Lane Car Park, Dutton Lane, and the surrounding commercial retail precinct.

The project aims to celebrate the rich cultural diversity of Cabramatta through a holistic integration of colour and landscape into the external elevational treatments of the new building.

2 URBAN DESIGN

2.1 FACADE DESIGN

2.1.1 COLOURED FEATURE SCREENS

A custom designed aluminium screen is proposed to the upper levels of the new building, and to the new northern walkway to the original Dutton Lane car park.

Comprising an array of vertically aligned fine aluminium tubes, the screen incorporates an array of colours, arranged in a seemingly random sequence. Colour tones have been selected to compliment the Dutton plaza building.

Viewed from a distance, the fine-scaled members will appear as a more singular colour experience across the various facade of the building.
The changing legibility of the facade at differing scales is an unusual effect and will be one of the defining architectural characteristics of the project.

2.1.2 COLOURED GLAZED SCREENS

A glazed screen incorporating an applied coloured graphic is proposed for the Hughes Street ground floor elevation.

A coloured pattern treatment will be applied to the internal face of the glass and is designed to compliment the choice of colours for the aluminium screens on the facades above and adjacent.

2 URBAN PLANNING

2.1.3 FACADE INTEGRATED PLANTING

The east and west elevations of the new building will integrate landscape on the upper levels, in the form of perimeter edge planters containing a Bamboo screen.

The integrated plating will serve to soften the form of the new building and bring a sense of nature into the heart of the Cabramatta CBD. Irrigation will be supplied within the planter boxes, which are to be fully integrated in the facaded design

2.2 BUILDING AND BOUNDARY ALIGNMENT

The northern facade of the proposed building is aligned with the existing commercial retail frontages to the east. The west facade is aligned with the existing Dutton Lane Car Park. These setbacks provide clear shop front lines and are in keeping with the bulk and scale of the existing context. Street front awnings are included along Hughes street, and on Dutton Lane East where a footpath is indicated.

2.3 CHANGES TO EXISTING LOTS

Prior to seeking a construction certificate for this proposal, a subdivision application to make changes to lot B DP 100284, Lots 1,2,3,4 DP 236708 will be made. The changes result in 3 new lots being created. Lot 1 containing Dutton Lane West, Lot 2 containing Hughes Street Multi Storey Carpark, and Lot 3 Containing Dutton Lane East.

The proposed Hughes Street car park on Lot 2 has 0m setbacks to Lot 1 and Lot 3, containing Dutton Lane East and Dutton Lane West which are not registered

roads. Therefore various easements will be created as a part of the subdivision application to ensure light and air is maintained to the carpark, as well as vehicle and pedestrian access to Hughes Street.

2.4 CONNECTION AND PERMEABILITY OF THE SITE

The permeable surrounding commercial retail and the pedestrian nature of the town centre site creates high pedestrian activity on Dutton Lane, which is also heavily used by vehicles accessing the various car parks and loading zones accessed from and on Dutton Lane.

The proposed design minimises vehicle traffic to Dutton Lane, improving pedestrian safety and vehicle wayfinding within the Dutton Lane sites including commercial shopfronts and shopping malls and arcades fronting onto Dutton Lane.

Internally the proposed carpark connects to the existing Dutton Lane Car Park and reconciles some existing internal circulation conflicts between the existing Dutton Lane Car Park and Dutton Plaza Car Park. A new lift and pedestrian access bridges connect the three car parks at the intersecting corner on the south-east of the proposed Hughes Street Car Park.

2.5 SAFETY AND SECURITY

The proposal has been designed with consideration for the four key principals set out in the Department of Planning and Environment's Crime Prevention Legislative Guidelines, surveillance, access control, territorial reinforcement, and space management. The following design features are noted:

- perforated aluminium screening to allow visual surveillance

2 URBAN PLANNING

- boom gates to ensure secure vehicle entry and exit
- appropriate lighting throughout carpark, including pedestrian entry points and around ticket machines and lifts etc
- provision of CCTV cameras

2.6 LIGHT POLLUTION

The existing residential apartment building to the west of the proposed car park has windows facing the car park. Light pollution from the additional 2 storeys of carpark has been assessed and addressed by the project electrical engineers Steensen Vaming.

The detained lighting design shall be in accordance with the Hughes Street Car Park Mechanical and Electrical Services DA Report. The following excerpt from the services report outlines the design parameters for lighting design:

“The artificial lighting to the car park including the carpark roof shall be designed to minimise light spill to adjacent properties and comply with the requirements of AS4282 Control of the Obtrusive Effects of Outdoor Light.”

WEST FACADE:

Solid concrete balustrades and upturns between 600mm - 1000mm high form barriers preventing direct headlight glare shining onto the adjacent residential buildings. Above the solid barriers, planting is proposed to minimise indirect headlight glare.

3 PARKING

NORTH FACADE:

The North facade is made up of a dense aluminium tube screen that will act to minimise headlight glare. It is also noted that to the north, residential dwellings are approximately 30m away, and across what is a highly trafficked road, with street lighting.

2.7 ACOUSTIC IMPACT

Acoustic Impact report by Marshall Day Acoustics confirms that noise emissions from the use of the car park have been calculated and demonstrates compliance with the NPfI noise level criteria at the nearest residential and commercial receivers.

3 PARKING

The proposed Hughes Street Car Park provides an additional 198 paid car parking spaces. The ground floor is accessed directly from Dutton Lane East with a direct entry from Dutton Lane East with 3.5m clear head hight to allow for small rigid vehicle (SRV) access into and throughout the ground floor.

Level 1 and level 2 act as an extension of the Dutton Lane Car Park floor plate, and contains 74 and 78 parking spaces respectively. Level 2 is an open air roof and contains 4 E-Car charging stations for electric vehicles to support the expected growing demand.

3.1 GROUND FLOOR TIME SHARED PARKING

The ground floor of Hughes Street Car Park contains 67 paid car parking spaces, 26 of which are time-shared with 12 SRV parking spaces for commercial delivery vehicles.

4 TRAFFIC

The SRV Parking spaces are connected to the surrounding commercial retail via a continuous and centrally located pedestrian pathway through Hughes street and Dutton Lane car parks.

3.2 ACCESSIBLE PARKING SPACES

A difference in the requirements for accessible parking spaces is noted between the Fairfield DCP and the Cabramatta Town Centre DCP with 1 in 100 or 3 in 100 required respectively. 3:100 is used to generate accessible parking space numbers. These parking spaces are located on the ground floor with direct access to the pedestrian pathway through Dutton Lane car park.

4 TRAFFIC

4.1 TRAFFIC IMPACT ASSESSMENT

A traffic impact assessment has been prepared as a part of the proposal. In this assessment, it is noted that a car park is not considered a traffic generator due to the minor modifications to the Dutton lane car park, and the net gain of 198 car parking spaces.

The findings of the traffic report are that vehicle movement in the local area would be improved with an additional 198 parking spaces. It is also noted that the additional parking spaces will improve vehicle queuing on Dutton Lane East as at peak times when the car park is at capacity, the entry boom gates allow vehicles to enter as vehicles exit the carpark. therefore additional car parking spaces will reduce the extent of 100% peak periods.

Further to this, internal changes to the existing carparks, and to Dutton Lane loop will result in improved flow for vehicles exiting the greater site.

4 TRAFFIC

4.2 CHANGES TO VEHICLE MOVEMENTS

The following recommendations made during the traffic study have been incorporated in the proposal:

4.2.1 REMOVE RIGHT-HAND TURN FROM DUTTON LANE EAST TO HUGHES STREET

The exit out of Dutton Lane Car Park to Dutton Lane East is removed. With no vehicles exiting at Dutton Lane East, the existing conflict of vehicles turning right onto Hughes Street is removed.

4.2.2 DUTTON LANE CAR PARK TO EXIT FROM HILL STREET

Vehicles exiting out of Dutton Lane Car Park are directed out through the unnamed lane to Hill street. Distributing vehicles exiting the site and reducing vehicle queuing at Dutton Lane West and within the carpark, allowing vehicles to enter the combined car parks. This change requires a section of Dutton Lane to be reversed to allow vehicles to travel south down the one-way lane.

4.2.3 CENTRAL ENTRY LOCATION

All vehicle entries to Hughes Street Car Park, Dutton Lane Car Park, and Dutton Plaza have been centralised at the junction of the three car parks on Dutton Lane East. This creates a single address for vehicles entering the car parks or delivering goods.

4 TRAFFIC

4.2.4 CENTRALISED EXIT LOCATION

Vehicles exiting the carparks have an additional 2 exits; Hughes Street Car Park ground floor, and via an exit ramp on the western facade. Exits have been relocated to the western side of the Dutton Lane minimising vehicle circulation overlaps.

One exit is retained from the north side of dutton plaza car park. Reversing this ramp to become an entry was considered and there are befits, but it was deemed a risk to remove the direct exit from Dutton Plaza and rely on the Dutton Lane Car Park and Hughes Street Car Park exits. Internal changes to Dutton Plaza will reduce the number of vehicles exiting via the northern exit ramp in Dutton Plaza, via the Dutton Lane Loop.

4.2.5 REVERSE EXISTING RAMPS IN DUTTON LANE CAR PARK

The existing ramps on the east and west of Dutton Lane Car Park are to be reversed so the up ramp serving vehicles entering is on the east with the entry ramp. The down ramp serving vehicles exiting is on the west with the exits. This will remove the conflict of inbound and outbound vehicles, and minimise vehicle movement in the central aisle of the car park. A pedestrian footpath is proposed here for public and delivery workers crossing Dutton Lane Car Park from Hughes street car park.

5 PEDESTRIAN SAFETY

5.1 CENTRALISED LIFT

A new lift is proposed to support the existing lifts within Dutton Lane Car Park. The lift is located in front of Dutton Lane Car Park at the intersection of the three car parks. Pedestrians access the lift lobby from each car park via lightweight bridges.

5.2 PEDESTRIAN MOVEMENTS

The ground floor lift lobby creates a central building address for pedestrians. The building managers office is relocated to the space adjacent to the lobby. New pedestrian paths link Hughes Street Car Park and Dutton Lane Car Park with the commercial retail to the south.

5.3 LEVEL PEDESTRIAN CROSSINGS TO HUGHES STREET

The existing four-lane break in the Hughes street footpath creates a hazard for pedestrians walking across the north of the site along Hughes Street, as well as for vehicles entering and exiting the site.

Proposed is a 2 lane raised crossing to Dutton Lane East, with Dutton Lane East spreading out to 3 lanes beyond. A single lane raised crossing is proposed for Dutton Lane West.

6 ESD APPROACH

6.1 SOLAR ARRAY

Photovoltaic panels are proposed on level 2, on an open structure over car spaces on the southern portion of the car park. The power generated is intended to support the power demand of the proposed car park.

6.2 RAIN WATER HARVESTING

Rainwater is proposed to be collected and stored in a tank under the ramp on the ground floor. This water is then proposed to be used to water the facade planting on the east and west facades.

6.3 E-CAR CHARING STATIONS

4 x E-Car charging stations are proposed for the roof of level 2, under the solar panels.

7 SIGNAGE

7.1 GLAZED FEATURE SCREEN TO HUGHES STREET

The glass screen on the ground floor of the Hughes Street Frontage provides a signage opportunity. The intent is to install electronic Fairfield city council and commercial tenancy signage in this location, within the height of the glass panels

7.2 LIFT TOWER AS CENTRAL SIGNAGE POINT

At the top of the Lift tower, a digital signage panel is proposed that will display available parking spaces, as well as public information signage such as the time and temperature, or Fairfield city council events. e.g. Moon Festival

7.3 AWNING SIGNAGE

On either end of the awning along Hughes Street, digital signs will hang displaying the available parking spaces. These signs will be clearly visible for vehicles approaching the car parks.

7.4 TOTEM SIGNAGE

Totem signage is proposed in footpaths around the site for wayfinding, and to indicate car park entries and high pedestrian zones.

8 WIND IMPACT

8.1 WIND IMPACT

Consideration for the effects of wind has been given during the design process. Consideration for the effect the proposal may have on the wind in the area is evident in the facade design and the massing.

The facade screening of the proposed carpark structure has been designed to allow the wind to permeate the carpark and for the carpark to thus ventilate naturally. It is anticipated that winds will therefore flow through the building largely unimpeded, without significant affect on the amenity of carpark users, pedestrians or local property owners.

Additionally, the massing of the proposed structure is consistent with the frontage of the commercial buildings fronting the majority of Hughes Street to the east of the site and the adjoining carpark structure to the south. Primarily the proposed building is less than the 10m above natural ground level.

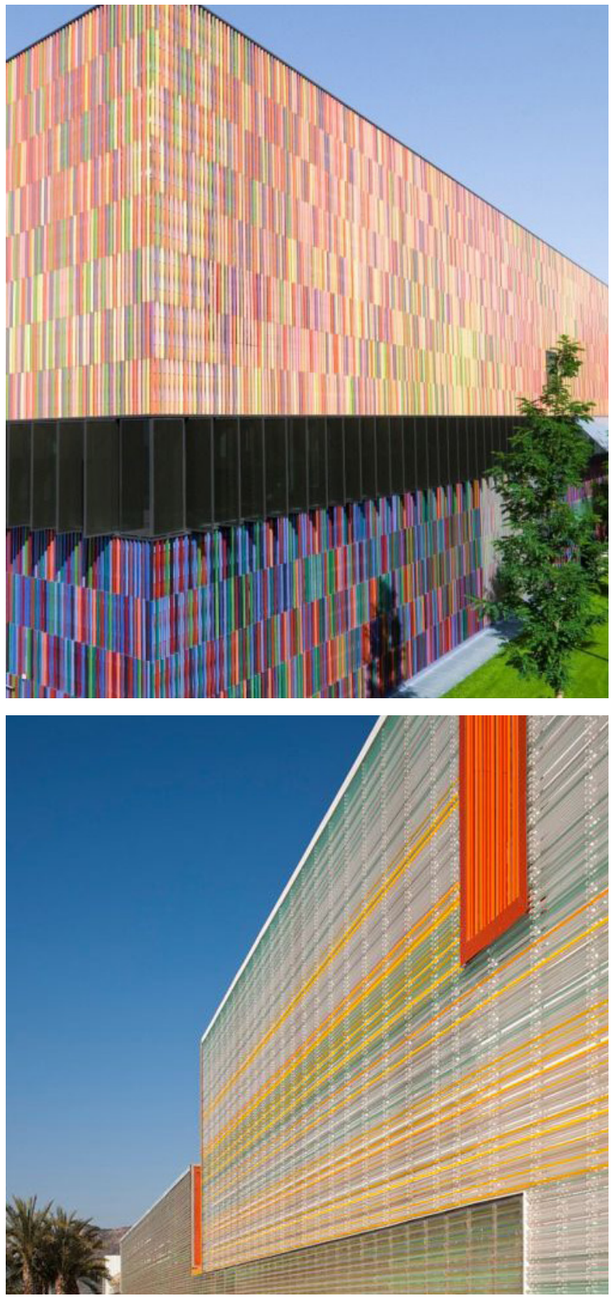
An awning is proposed above the Hughes street and Dutton Lane frontages to provide pedestrian weather protection in inclement conditions.

APPENDIX
FACADE COLOUR STUDIES

INSPIRATION
CABRAMATTA- COLOUR AND COMMUNITY

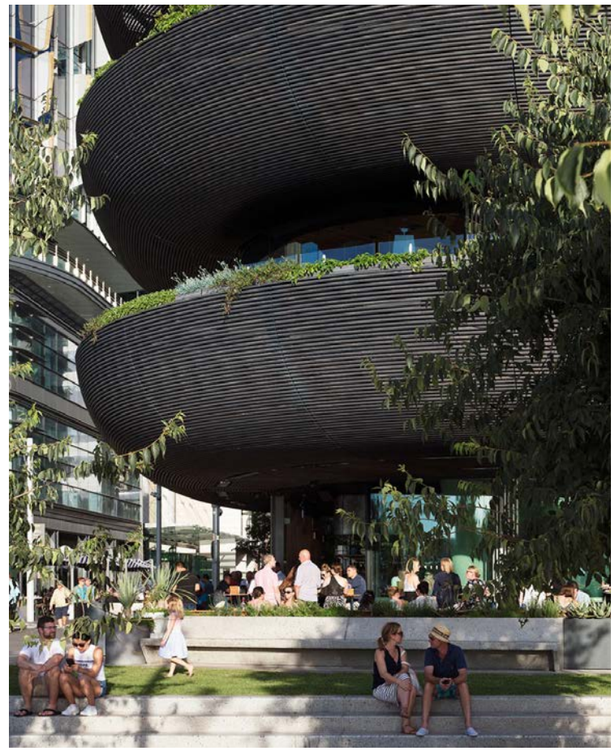
FACADE CONCEPT
COLOURFIELD AND INTEGRATED PLANTING

COLOURFIELD
INTERNATIONAL EXAMPLE



INTEGRATED PLANTING
INTERNATIONAL EXAMPLE

INTEGRATED PLANTING
COLLINS AND TURNER SYDNEY PROJECTS

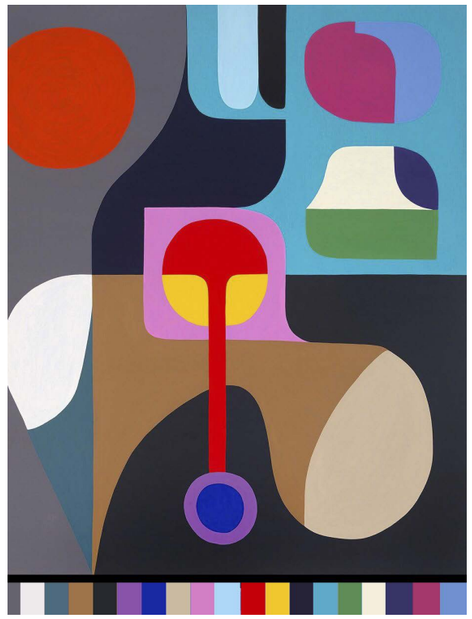


EXAMPLE COLOUR ANALYSIS
SYDNEY ARTIST STPEHEN ORMANDY

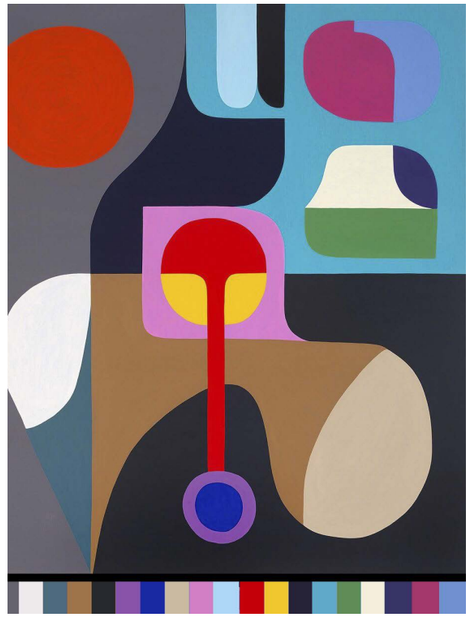
COLOUR STUDY
VERSION 1A_INDIVIDUAL COLOURS
LIMITED COLOUR PALLETTE INCLUDING RED TONES

COLOUR STUDY
VERSION 1B_CLUSTERED COLOURS
LIMITED COLOUR PALETTE INCLUDING RED TONES

COLOUR STUDY
VERSION 2A_CLUSTERED COLOURS
EXPANDED COLOUR PALETTE



COLOUR STUDY
VERSION 2B_CLUSTERED COLOURS
EXPANDED COLOUR PALETTE



Architecture

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