

CANADA BAY LOCAL ENVIRONMENTAL PLAN

2013

PLANNING PROPOSAL

1-9 Marquet and 4 Mary Streets, Rhodes

12 June, 2018

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1. INTRODUCTION

This report has been prepared on behalf of the owners of 1-9 Marquet and 4 Mary Streets, Rhodes (the site) seeking to vary the height of building and floor space ratio (FSR) through the submission and consideration of a Planning Proposal. The height of buildings and floor space ratio (FSR) controls applicable to the site under the *Canada Bay Local Environmental Plan (LEP) 2013* would be amended, but the current zoning of the site would be retained.

The proponent has negotiated the purchase of the whole site and is concerned that the present controls do not provide for the highest and best use of the combined parcel. Over the last two years, substantial negotiation has been undertaken with Council, in terms of the potential built form, solar impact and community benefit that could be derived from the proposal.

As a result, on 15 May, 2018 Council resolved as follows:

- THAT a Voluntary Planning Agreement for uplift above the controls in the Canada Bay Local Environmental Plan 2016 that apply to1 – 9 Marquet Street and 4 Mary Street, Rhodes be agreed in principle prior to resolving to submit the Planning Proposal to the Department of Planning and Environment for a Gateway Determination.
- 2. THAT a probity protocol be developed and implemented to guide the further progress of the I Prosperity Planning Proposal.
- 3. THAT the Planning Proposal submitted by I-Prosperity for land at 1 9 Marquet Street and 4 Mary Street, Rhodes be endorsed for submission to the Department of Planning and Environment, subject to the requirements in point 4 of this resolution being submitted.
- 4. THAT prior to submission of the Planning Proposal to the Department of Planning and Environment, the applicant is to submit:
 (a) an updated Planning Proposal that refers to a Floor Space Ratio of 13.06:1 and a maximum Height of Building of 117m.
 (b) concept plans of the proposed building that illustrate the provision of



343m of land at ground level on the corner of Marquet Street and Mary Street be provided as a partly open/partly covered open space that is to be publically accessible.

- (c) a Scientific Report providing evidence of like –for -like replacement of solar amenity for any overshadowing of Union Square that also addresses legal, operational, risk and ongoing maintenance and management issues associated with the operation of the heliostat over the life of the building.
- (d) a Traffic and Transport Assessment that addresses the cumulative impact of planned growth on the Rhodes Peninsula (including the traffic generated by the Planning Proposal) on the operation of the road and transport network and the proposed vehicular access arrangements for the site -the report is to assume that no parking is provided for 93 apartments.
- (e) a Wind Assessment to identify the impact of the proposed building envelope on the immediate public and private domain and incorporate any mitigation measures or design changes that should be imposed.
- (f) a SEPP 65 Report that addresses how the design quality principles of SEPP 65 and the Apartment Design Guide will be achieved.
- (g) a Preliminary Site Investigation carried out in accordance with the Contaminated Land Planning Guidelines that identifies any past or present potentially contaminating activities and provides a preliminary assessment of the extent and nature of site contamination if it exists.
- 5. THAT the General Manager be granted delegation to make minor modifications to the Planning Proposal following the receipt of a Gateway Determination.
- 6. THAT the Rhodes West Development Control Plan be amended to:(a) reflect the building envelope envisaged by the Planning Proposal;
 - (b) include development controls that require the following dwelling mix:
 - Studio (0% -10%),
 - •1 bedroom (0% -20%),
 - 2 bedroom (50% -80%) and
 - •3+ bedroom dwellings (10% 100%).



- (c) require a maximum floor plate of 900m Gross Floor Area (GFA), excluding the area of wintergardens for the purpose of defining the area of floor plates only.
- (d) require a number to be determined of dwellings with zero (0) car parking spaces
 for 1 9 Marquet Street and 4 Mary Street, Rhodes, following review by Council's
 traffic consultants.
- 7. THAT should the Planning Proposal receive a Gateway Determination, the draft Rhodes West Development Control Plan and draft Voluntary Planning Agreements be exhibited concurrently with the Planning Proposal.
- 8. THAT a report be provided to Council advising of the outcome of the public exhibition period for the Planning Proposal, draft Development Control Plan and Voluntary Planning Agreement.

The purpose of this submission is to update the previous review (report dated 21-05-16) of the current standards and to propose appropriate development controls for the site. These changes will provide the opportunity to redevelop the site to its highest and best yield, within the relevant opportunities and constraints available to it and within its surrounding context. Other fine grain issues mentioned in Council's resolution such as traffic / transport, built form, ADG compliance etc., will also be updated and clarified in terms of the most recent concept design. These issues will either be discussed herein or in the following updated reports and plans:

- Aeronautical Impact Assessment The Ambidji Group Pty Ltd.
- Concept Architectural Designs Koichi Architects
- Heliostat High Level Review TILT Industrial Design.
- Traffic & Transport report from Henson Consulting.
- Urban Design & ADG Review Koichi Architects
- Preliminary Contamination Report
- Wind Impact Assessment SLR Global Environmental Solutions.



All of these studies and associated reports consider the technical aspects related to the updated concept proposal and any potential impacts from its height and built form. In each instance those considerations lead to a positive recommendation.



2. SITE LOCATION & HISTORY

The site that is the subject of this report comprises Lots 1 - 5 and 6 in DP 17671. It is known as 1-9 Marquet and 4 Mary Streets, Rhodes and has an area of $2902m^2$.

The site is shaped as a parallelogram, with a frontage of 58.12 metres (m) to Marquet Street and 51.60 m to Mary Street. The land generally has a north / south orientation, with an east west cross fall of approximately 2m. *Figure 1* below provides a copy of the site survey.



The site is occupied by a series of single storey dwellings and is surrounded by a number of high - rise residential and mixed - use developments, recently constructed as pert of the Rhodes Peninsula gentrification. Train services are available to the City from Rhodes Station located less than 100m from the site.

Bus services are also available nearby to Concord, Ryde and a number of other centres. A bridge across Homebush Bay to Wentworth Point will shortly be completed, while substantial commercial and retail facilities are available within the adjacent Rhodes Corporate Park and Shopping Centre. The general location of the site and the surrounding built form are shown in *figures 2 and 3* on the following page.



Figure 2 – Location Map



Map reproduced with pennission of UBD, Copyright Universal Publishers Pty Ltd. DG 05/05

Figure 3 – Aerial Photo



Source: © DEPARTMENT OF LANDS SIX Portal www.lands.nsw.gov.au



3. CURRENT PLANNING CONTROLS

The site is subject to the provisions of *Canada Bay Local Environmental Plan (LEP) 2013* with the land zoned *B4 Mixed*. The relevant zoning is shown in *figure 4* below.



Figure 4 - Current Zoning Map

Source: Canada Bay LEP 2013 - Zoning Map

The relevant zone objectives and permissible development within the LEP are as follows:

Zone B4 Mixed Use

- 1 Objectives of zone
- To provide a mixture of compatible land uses.
- To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.

2 Permitted without consent Environmental protection works



3 Permitted with consent

Boarding houses; Building identification signs; Business identification signs; Child care centres; Commercial premises; Community facilities; Educational establishments; Entertainment facilities; Function centres; Hotel or motel accommodation; Information and education facilities; Light industries; Medical centres; Passenger transport facilities; Recreation facilities (indoor); Registered clubs; Residential flat buildings; Respite day care centres; Restricted premises; Roads; Seniors housing; Shop top housing; Any other development not specified in item 2 or 4

4 Prohibited

Agriculture; Air transport facilities; Airstrips; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Correctional centres; Crematoria; Depots; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Farm stay accommodation; Forestry; Freight transport facilities; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial training facilities; Industries; Jetties; Moorings; Open cut mining; Recreation facilities (major); Recreation facilities (outdoor); Residential accommodation; Resource recovery facilities; Rural industries; Sewage treatment plants; Signage; Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Warehouse or distribution centres; Waste disposal facilities; Water recreation structures; Water supply systems

The objectives of the B4 zoning are founded on achieving a mixture of commercial, retail and residential uses in accessible locations and centres such as Rhodes. The proponents are happy with the zoning of the site, but are concerned at the development controls that have been allocated to it under the LEP.

Over the last 5 years Council has undertaken considerable Strategic Planning work in relation to the Rhodes Peninsula, which has seen a substantial uplift in the area's development opportunities. Development has occurred in recent years in alignment with this program.



Originally, the Rhodes Peninsula was subject to *Sydney Regional Environmental Plan (SREP)* 29 - Rhodes Peninsula, gazetted in 1999. However, Planning control for the area diverted to Council not long after 2010. Council then embarked on the preparation of a concept plan, which subsequently morphed into the Station Precinct Master Plan and associated DCP. A Planning Proposal, based largely on the recommendations of the Master Plan came into force on 18 December, 2015.

The subject site was originally intended for a substantial uplift in potential building height (99m - 30 storeys) and floor space ratio (6.5:1) under the adopted Station Precinct Master Plan. However, that uplift was based on an amalgamation of the subject properties and the adjoining No.1 Marquet Street and when this became unlikely, the land was excised from the Planning Proposal, denying the opportunity for enhanced development opportunities. *Figure 5* provides copies of diagrams from the master plan showing the anticipated growth in development potential for the site.



Figure 5 – Master Plan Diagrams

Source: Station Precinct Master Plan - Part 5.0 (Section 4)





Source: Station Precinct Master Plan - Part 5.0 (Figure 35)

These outcomes were supported by associated urban design and solar analysis to ensure any impacts on the Town Square and Peg Patterson Park were minimised. However, Council at its meeting on 15 September, 2015 resolved as follows:

- A. THAT the content of this report and the Station Precinct Rhodes Report on Submissions 2015 are noted; SEP
- B. THAT the Lots 1, 2, 3, 4, 5 and 6 of DP17671 (No's 1, 3, 5, 7, 9 Marquet St and 4 Mary St) be deferred from the Planning Proposal (PP 2015 CANAD 001 00) because of ongoing issues in relation to site consolidation and Council's preferred planning outcome for the sites.
- C. THAT the Planning Proposal excluding the deferred portion of the site (Lots 1, 2, 3, 4, 5 and 6 of DP 17671 (Nos 1, 3, 5, 7, 9 Marquet St and 4 Mary St)) be forwarded to the Department of Planning and Environment to enable drafting of the legal instrument and subsequent gazettal by the Minister, Planning and Environment or his delegate;
- D. THAT land owners subject to this Planning Proposal and all submitters be advised of Council's recommendation.

Following the gazettal of the amendment to the LEP, the maximum building height and floor space ratio were restricted as shown in the extracts of the LEP maps in *figure 6* below.





Source: Canada Bay LEP 2013 - Height of Buildings Map



Source: Canada Bay LEP 2013 - Floor Space Ratio (FSR) Map



4 PROPOSED AMENDMENTS

Under this updated Planning Proposal it is intended to retain the current *B4 Mixed Use* zoning under the *Canada Bay LEP 2013* applicable to the site and to seek an uplift in the applicable *"height of building"* and *"FSR"* controls.

As mentioned in Section 3 of this report, Council had originally intended to provide the site with uplift in development potential under the adopted Station Precinct Master Plan. This strategic work was accompanied by and based on urban design and solar analysis confirming that increased heights and FSR in this precinct were reasonable. The site was earmarked for a 99m building height and 6.5: 1 FSR as shown previously in *figure 5*.

However, in resolving to adopt the master plan and move forward with an associated Planning Proposal, Council resolved to defer the site and the adjoining 1 Marquet Street from the intended amendment to the LEP. This decision was based on a concern regarding site amalgamation and not any planning or urban design issue. As a result, the site currently is restricted to a maximum building height control of 23m and an FSR 0f 1.76:1.

There is no doubt (based on the Council's strategic planning work) that the site is capable of sustaining a much greater building height and FSR than that currently provided in the LEP. It is not unreasonable to suggest that the nearby sites provide some guidance on what may be an appropriate uplift, subject to impacts on the public domain, solar access, traffic and ultimate building design.

Through the last two years the proponent through its Consultant team has attempted to address these matters while the question of site amalgamation has been resolved through the purchase of No. 1 Marquet Street and its incorporation into the site. In discussions with Council a number of built form options have been explored including various heights, shapes and holes within the structure to permit solar penetration to the nearby Union Square. Unfortunately, these options have not been able to be formalised for a number of reasons, culminating in the final submission, that was the subject of the Council resolution on 15 May, 2018.

The detailed outcome is discussed below:



Building Height

In relation to the Rhodes Station Precinct, the relevant Council strategic framework (DCP & Masterplan) have sought to ensure that in terms of height, the tallest structure is closest to the railway station, with buildings cascading down towards the waterfront. In working through the potential for the subject site, the proponent has respected this objective, with the figure 7 below showing the proposed building envelope as considered and agreed to by Council on 15 May, 2018.



Figure 7 – Height Comparison

Proposed Hebostat



The above diagram clearly shows the relationship in height terms between the approved and proposed towers as sought by Council. Further detailing and design work is being undertaken by the project Architect and will be submitted with the updated Planning Proposal as per Council's resolution.

In terms of solar impact on the Town Square or Peg Patterson Park, in the middle of the day in mid Winter, there is only limited impact from the current proposal. The solar diagrams submitted to Council and forming part of the Planning proposal, show that the building will impact on the Town (Union) Square, between 1.30pm - 2pm. It is not the overall height of the building that causes this impact, but the angle of the sun hitting the middle portion of the building.

In order to overcome this impact the proposal incorporates a "heliostat" similar to the approved building in walker Street. The heliostat will provide a similar luxe level within the square to the approved heliostat on the adjacent building and will follow that facility to ensure that any shadows cast over the square are eradicated between 12 noon and 2pm mid winter.

Secondly, the proponent has agreed to provide an area of $343m^2$ at the ground plan at the corner of Marquet and Mary Streets for use by the public. This space is both open and covered is at least 6m in height and provides an alternate area of public domain, to offset that part of the Union Square that will be shadowed by the proposal.

Under the current LEP, the properties to the north east of the site (6 - 14 Walker Street) enjoy a maximum building height of 127m (RL 139.6) not including the proposed heliostat. The current proposal contains 36 levels, has a top height of RL 129.6, not including the proposed heliostat, allowing for a 10m clear height variation between the two towers. That level of "gap" will be clearly evident from the public domain and surrounding buildings. The top height proposed also allows for compliance with the floor to floor height requirements (33 levels @ 3.1m) contained within the *Apartment Design Guideline (ADG)* with a 14m commercial podium.

The proponent has formed the view that the site is the last remaining "key site" within Rhodes West and together with 6 - 14 Walker Street has the potential to provide a strong northern entry point to the Rhodes Town Centre. There are also opportunities for substantial views from such a building particularly from the upper levels whilst the two towers would provide a focal point for Rhodes in the round.

An amended LEP Height of Buildings Map for the site has been prepared and is shown in *figure* 8 on the following page.



Figure 8 - Proposed Height Map



Floor Space Ratio (FSR)

The current FSR of 1.76:1 is clearly insufficient for the proposed new building height. Any structure would need to be compliant with the ADG and DCP in terms of building depth and setbacks etc., with the resultant FSR likely representing a simple by product of that envelope and the number of floors. As currently proposed and accepted by Council the FSR of the concept design is 13.06:1 including the winter gardens.

An amended LEP Floor Space ratio (FSR) Map for the site has been prepared and is shown in *figure 9* on the following page.



Figure 9 - Proposed FSR Map



Rhodes Ferminala Station Precinct



5. PLANNING JUSTIFICATION

5.1 - Strategic Planning Assessment

This section of the report reviews a number of recent Strategic planning Initiatives and resultant Plans that have guided the Council's strategic planning programmes and will continue to do so in the coming years. It also provides clarification of the proposal's consistency with a number of Strategic planning requirements including Section 117 Directions and State Environmental Planning Policies etc. These matters are discussed further in the *Tables 1 - 2* below.

Table 1. State Environmental Planning Policies			
SEPP	CONSISTENT	COMMENT	
SEPP No. 1- Development Standards	Not Applicable	The Canada Bay LEP is a standard Instrument LEP & incorporates the provisions of Clause 4.6	
SEPP No. 4 – Development Without Consent and Miscellaneous Exempt and Complying Development	Not Applicable		
SEPP No. 6 – Number of Storeys in a Building	Consistent		
SEPP No. 14 – Coastal Wetlands	Not Applicable		
SEPP No. 15 – Rural Land sharing Communities	Not Applicable		
SEPP No. 19 – Bushland in Urban Areas	Not Applicable		
SEPP No 21 – Caravan Parks	Not Applicable		
SEPP No. 26 – Littoral Rainforests	Not Applicable		



SEPP	CONSISTENT	COMMENT
SEPP No. 29 – Western Sydney Recreation Area	Not Applicable	-
SEPP No. 30 – Intensive Agriculture	Not Applicable	
SEPP No. 32 – Urban Consolidation (Redevelopment of Urban Land)	Consistent	The current and proposed land use of the site incorporates residential activities in an increased density. The proposed mixed use of the site will be compatible with surrounding land uses and meets the aims and objectives of the SEPP
SEPP No. 33 – Hazardous and Offensive Development	Not Applicable	
SEPP No. 36 – Manufactured Home Estates	Not Applicable	
SEPP No. 39 – Spit Island Bird Habitat	Not Applicable	
SEPP No. 41 – Casino Entertainment Complex	Not Applicable	
SEPP No. 44 – Koala Habitat Protection	Not Applicable	
SEPP no. 50 – Canal Estate Development	Not Applicable	
SEPP No. 32 – Urban Consolidation (Redevelopment of Urban Land)	Consistent	The current and proposed land use of the site incorporates residential activities in an increased density. The proposed mixed use of the site will be compatible with surrounding land uses and meets the aims and objectives of the SEPP

SEPP	CONSISTENT	COMMENT
SEPP No. 32 – Urban Consolidation (Redevelopment of Urban Land)	Consistent	The current and proposed land use of the site incorporates residential activities in an increased density. The proposed mixed use of the site will be compatible with surrounding land uses and meets the aims and objectives of the SEPP
SEPP No. 33 – Hazardous and Offensive Development	Not Applicable	
SEPP No. 36 – Manufactured Home Estates	Not Applicable	
SEPP No. 39 – Spit Island Bird Habitat	Not Applicable	
SEPP No. 41 – Casino Entertainment Complex	Not Applicable	
SEPP No. 44 – Koala Habitat Protection	Not Applicable	
SEPP no. 50 – Canal Estate Development	Not Applicable	
SEPP No. 52 – Farm Dams and Other Works in Land and Water Management Plan Areas	Not Applicable	
SEPP No. 55 – Remediation of Land	Consistent	It is unlikely that previous uses of the land, would have rendered it contaminated, however appropriate testing could be undertaken as part of a future development application process if required, should the site be re zoned.
SEPP No. 59 – Central Western Sydney Regional Open Space and Residential	Not Applicable	

SEPP	CONSISTENT	COMMENT
SEPP No. 60 – Exempt and Complying Development	Consistent	The proposed use of the land for mixed use purposes would require the consideration / assessment of a Development Application
SEPP No. 62 – Sustainable Aquaculture	Not Applicable	
SEPP No. 64 – Advertising and Signage	Not Applicable	The proposed use of the land is for mixed use, with any likely signage related to the use and occupation of parts of the building only.
SEPP NO. 65 – Design Quality of Residential Flat Development	Consistent	Any future residential component would be subject to the provisions of SEPP 65. The initial concept envelopes achieve ADG separations etc.
SEPP No. 70 – Affordable Housing (Revised Schemes)		Applies to the City of Canada Bay, but relates to Development Applications.
SEPP No. 71 – Coastal Protection	Not Applicable	-
SEPP (Affordable Rental Housing) 2009	Consistent	Affordable housing is unlikely to form part of a future development.
SEPP (Building Sustainability Index: BASIX) 2004	Consistent	
SEPP (Exempt and Complying Development Codes 2008	Consistent	
SEPP (Housing for Seniors or People with a Disability) 2004	Consistent	
SEPP (Infrastructure) 2007	Not Applicable	



SEPP	CONSISTENT	COMMENT
SEPP (Kosciuszko National Park – Alpine Resorts) 2007	Not Applicable	
SEPP (Kurnell Peninsula) 1989	Not Applicable	
SEPP (Major Development) 2005	Not Applicable	
SEPP (Rural Lands) 2008	Not Applicable	
EPP (Sydney Region Growth Centres) 2006	Not Applicable	
SEPP (Western Sydney Employment Area) 2009	Not Applicable	
REP No. 5 – Chatswood Town Centre)	Not Applicable	
SREP No. 8 – Central Coast Plateau Areas	Not Applicable	
REP No. 9 – Extractive Industry (No 2 – 1995)	Not Applicable	
SREP No. 16 - Walsh Bay	Not Applicable	
SREP No. 18 – Public Transport Corridors	Not Applicable	
SREPP No. 19 – Rouse Hill Development Area	Not Applicable	
SREP No. 20 – Hawkesbury – Nepean River (No 2 – 1997)	Not Applicable	
SREP No. 24 – Homebush Bay Area	Not Applicable	
SREP No. 25 – Orchard Hills	Not Applicable	
SREP No. 26 - City West	Not Applicable	
SREP No. 28 – Parramatta	Not Applicable	



SEPP	CONSISTENT	COMMENT
SREP No. 30 - St Marys	Not Applicable	
SREP No. 33 – Cooks Cove	Not Applicable	
SREP (Sydney Harbour Catchment) 2005	Not Applicable	The site is within the area covered by the SREP but its requirements are not immediately applicable to the Planning Proposal. Any future Development Application would need to give consideration to it.

Clause	Direction	Consistent	Comments
	1 Employs	nent and Resourc	es
1.1	Business and Industrial Zones	Not Applicable	The proposal seeks to retain the site's B4 – Mixed Use zoning, maintaining the potential for commercial / retail uses on site.
1.2	Rural Zones	Not Applicable	
1.3	Mining, Petroleum Production and Extractive Industries	Not Applicable	
1.4	Oyster Aquaculture	Not Applicable	
1.5	Rural Lands	Not Applicable	
	2 Environ	nment and Herita	ge
2.1	Environment Protection Zones	Not Applicable	
2.2	Coastal Protection	Not Applicable	
2.3	Heritage Conservation	Not Applicable	The site is not listed as an Item of Environmental heritage, nor is it located within a Heritage Conservation Area

Clause	Direction	Consistent	Comments
	3 Housing, Infrastru	cture and Urban D	Development
3.1	Residential Zones	Consistent	The proposed rezoning is consistent with the objectives of the Section 117 Direction, as it will retain the opportunity for residential uses on the site in an increased density. This will assist in the provision for identified housing needs within the Inner West Sub Region.
3.2	Caravan Parks and Manufactured Home Estates	Not Applicable	
3.3	Home Occupations	Consistent	
3.4	Integrating Land Use and Transport	Consistent	The site is located on within Rhodes West with direct access to multiple forms of public and private transport infrastructure
3.5	Development near Licensed Aerodromes	Not Applicable	
3.6	Development near Shooting Ranges	Not Applicable	
	4 H	azard and Risk	
4.1	Acid Sulfate Soils	Consistent	The site is s not nominated as containing Acid Sulfate Soils on the relevant Canada Bay LEP 2013 map
4.2	Mine Subsidence and Unstable Land	Not Applicable	
4.3	Flood Prone Land	Not Applicable	
4.4	Planning for Bushfire Protection	Not Applicable	

Clause	Direction	Consistent	Comments
	5 Reg	ional Planning	1 - 1 - 0
5.1	Implementation of Regional Strategies	Consistent	See Section 5 of this report
5.2	Sydney Drinking Water Catchments	Not Applicable	
5.3	Farmland of State and Regional Significance on the NSW Far North Coast	Not Applicable	5
5.4	Commercial and Retail Development along the Pacific Highway, North Coast	Not Applicable	
5.5	Development in the vicinity of Ellalong, Paxton and Millfield (Cessnock LGA) (Revoked 18 June 2010)	Not Applicable	
5.6	Sydney to Canberra Corridor (Revoked 10 July 2008. See Amended Directions 5.1)	Not Applicable	
5.7	Central Coast (Revoked 10 July 2008. See amended Directions 5.1)	Not Applicable	
5.8	Second Sydney Airport: Badgerys Creek	Not Applicable	
6.1	Approval and Referral Requirements	Consistent	This is an administrative matter for the relevant Planning Authority
6.2	Reserving Land for Public Purposes	Not Applicable	н.
6.3	Site Specific Provisions	Consistent	
	7. Met	ropolitan Planning	
7.1	Implementation of the Metropolitan Strategy	Consistent	See Section 5.4 of this report



5.3 - Draft Inner West Sub Regional Strategy

The draft Inner West Sub Regional Strategy sets out the aims and objectives for the sub region noting that the area in which the site is located currently has a housing density of greater than 25 dwellings per hectare. This outcome is a result of the precinct's predominant zoning permitting residential flat development and the take up of medium density hosing over many years.

The Strategy is seeking an additional 30,000 dwellings by 2031 within the sub region and notes that as there are no new release areas the growth will need to b accommodated within existing residential areas. It is anticipated that 10,000 of those new dwellings will be located within the City of Canada Bay Council area. While a large number will be built at Rhodes, there is ample opportunity for infill sites such as the subject land.

It is considered that the *B4 Mixed Use* zoning of the subject site is consistent with the aims of the Inner West Sub Regional Strategy as it maintains commercial / retail opportunities and potentially increases residential outcomes.

5.4 - Metropolitan Plan for Sydney 2036

The Metropolitan Plan for Sydney 2036 ("Metro Plan") aims to provide a framework in which the key challenges facing Sydney such as a population growth, the need to locate more jobs closer to home, the provision of more efficient transport, and the like can be addressed to achieve a more sustainable city. A pivotal focus is to develop a "*City of Cities*" structure enabling people to spend less time travelling to access work, services, markets or regional facilities.

The Plan includes the following objectives designed to ensure the viability of its subregions.

- The attainment of specific regional subregional housing targets
- The efficient utilisation of existing / new infrastructure
- The concentration of housing density in and around corridors and centres, particularly railway stations
- The creation of vibrant mixed use centres that accommodate both working and living.



The Plan encourages higher density development close to existing public transport infrastructure, services and facilities and picks up on the Sub Regional strategy in that it includes directions for increased housing as follows:

- Increase housing choice as part of the housing target.
- Concentrate development and strengthen major centres, towns, villages, small villages and neighbourhoods.
- Enable communities to "age in place."

The Plan and draft strategy envisage that the majority of new housing will be located in existing urban areas, focused around centres, to take advantage of existing services such including shops and public transport. In that context the development of land for good quality medium density housing close to both Five Dock and Drummoyne centres such as the subject land is consistent with the intent of the plan.

5.5 - Draft Metropolitan Strategy for Sydney to 2031

The draft metropolitan Strategy indicates the Government's preferred approach to achieving a balanced and changing City while managing its growth up until the year 2031. The vision is for Sydney "as a strong global city, connected to opportunities around the world while also building great local places no matter where in Sydney people live."

To achieve the desired outcomes the Metropolitan Area has been divided into a number of Sub Regions, with the subject land located within the *Central Sub Region*. The Strategy forecasts a population within the Sub Region of 1,385,000 people by 2031,which is an increase from the current of 242,000. In meeting this target it is estimated that an additional 138,000 dwellings will be required.

The intent of the strategy is to create a liveable city where infill housing can occur close to transport and commercial centres and whilst it promotes strong growth in certain locations, it notes the value of locations such as the subject site, through its priorities including the following:

• enable housing intensification throughout the subregion, particularly around established and new centres,



5.6 - A Plan for Growing Sydney (2014)

The Department of Planning & Environment released *A Plan for Growing Sydney (the Sydney Metropolitan Strategy)* in December 2014. It is the State Government's 20 year plan for the growth of the Sydney Metropolitan Area. The Plan provides direction for Sydney's productivity, environmental management, and liveability; and for the location of housing, employment, infrastructure and open space.

Within the Plan a vision for Sydney to be *a strong global city, a great place to live* is espoused, with this vision to be supported by the following 4 goals:

Goal 1: A competitive economy with world-class services and transport;
Goal 2: A city of housing choice with homes that meet our needs and lifestyles;
Goal 3: A great place to live with communities that are strong, healthy and well connected; and

Goal 4: A sustainable and resilient city that protects the natural environment and has a balanced approach to the use of land and resources.

The Plan sets out the following three planning principles to guide how Sydney grows:

Principle 1: Increasing housing choice around all centres through urban renewal in established areas

Principle 2: Stronger economic development in strategic centres and transport gateways

Principle 3: Connecting centres with a networked transport system

Under the Plan the Metropolitan area is divided into six subregions, being - Central; West Central; West; North; South West; and South. The Plan contains priorities for each subregion with the City of Canada Bay being located within the Central Sub region.

In housing terms the Plan seeks to provide a broader range of housing types closer to work places and schools, public transport, shops and services to improve liveability of Sydney's residents. Differing options for varied housing styles relative to different stages of people's lives will be promoted as will a strong focus on affordability.



Under the Plan it is envisaged that an additional 664,000 dwellings will be built within the Central sub region.

A Plan for Growing Sydney seeks to provide greater opportunities for people to work closer to home, with job creation development being fostered in local centres and communities.

The current Planning Proposal conforms to these stated intents of the Plan as it will facilitate additional local housing close to an identified regional centre (Rhodes), located on a major rail line and bus routes. The proposal will retain the opportunity for commercial activities on the site, providing local retail / business and employment opportunities.

5.7 - Greater Sydney Region Plan - A Metropolis for Three Cities

In March 2018 the Greater Sydney Commission released the *Greater Sydney Region Plan - A* Metropolis for Three Cities.

The plan is built on a vision of three cities where most people reside within 30 minutes of their jobs, education and health facilities, services and great places. This position is derived from and consistent with the 10 Directions in *Directions for a Greater Sydney*, which establish the aspirations for the region over the next 40 years and are a core component of the vision and a measure of the Plan's performance.

The Plan seeks to create three new Cities within the Sydney Metropolitan Area to best address the needs of a growing and changing population. The three new Cities are:

- The Western Parkland City
- The Central River City
- The Eastern Harbour City.

The Plan seeks to integrate land Use and Transport Planning to improve liveability, productivity and sustainability by spreading the benefits of growth. $\frac{1}{MP}$ It is projected that the population of Greater Sydney will grow $\frac{1}{MP}$ to 8 million over the next 40 years, with almost half of that population residing west of Parramatta. It is hoped that having three cities, each with supporting metropolitan and strategic centres, will put workers closer to knowledge- intensive jobs, cityscale infrastructure and services, entertainment and cultural facilities.



Figure 10 below provides a spatial representation of the three City Vision



Figure 10 – Three City Vision



The Plan looks at each of the three cities in respect to the interplay between the Following four issues:

- Infrastructure and Collaboration;
- Liveability;
- Productivity; and
- Sustainability

The Plan then sets out 10 Directions to achieve the desired goals with each Direction divided into a series of Indicators with each of those made up of a number of objectives and measures of attainment. The Plan has been prepared concurrently with *Future Transport 2056* and *State Infrastructure Strategy 2018–2038* to align land use, transport and infrastructure outcomes for Greater Sydney for the first time in a generation. The transport initiatives in this Plan are sourced from *Future Transport 2056*.

The Plan does not deal with specific locations within the three cities, although the City of Canada bay falls within the Eastern Harbour City. To give effect to the plan the Commission has also developed and delivered regional and district plans which will achieve legislative effect through local plans.

The Commission has now (March 2018) finalised five District Plans, which are designed to guide the implementation of the Greater Sydney Plan at a District level. These 20-year plans form the link between regional and local planning. They inform local environmental plans, community strategic plans and the assessment of planning proposals. The District Plans will also help Councils to plan and deliver for growth and change, and to align their local planning strategies to place-based outcomes.

The District Plan has been prepared in accordance with section 3.4 of the *Environmental Planning and Assessment Act 1979*. As such, it must include For identify the basis for strategic planning in the district, with respect to economic, social and environmental matters and the actions for achieving them.



Part 3 of The District Plan looks at "Liveability" in the District with *Planning Priority E5* discussing *Providing housing supply, choice and affordability, with access to jobs, services and public transport.* This section deals with Housing Strategies to be prepared by Councils to facilitate short and medium term housing supply to service the need for housing / population growth and infrastructure delivery. Rhodes has been identified as a priority precinct, with the short term (2016 - 2021) housing target for the City of Canada Bay being 2150 new dwellings. The Plan nominates that these are "minimum targets".

5.8 Canada Bay Local Planning Strategy 2010

Council prepared its local Planning Strategy for exhibition with its draft LEP in 2010. The purpose of the strategy was to provide a framework within which the future LEP and DCP could be developed, so as to achieve the relevant regional planning objectives.

In relation to Rhodes the Strategy seeks to ensure the provision of a viable mixed use centre with commercial, retail and residential opportunities that complements the major facilities at Sydney Olympic Park. It also acknowledges the opportunities available in and nearby to the Council's traditional centres including Drummoyne and Five dock.

The Strategy further developed the concepts and planning principles espoused in SREP 29 and identified a need for a number of improvements to the planning framework particularly in terms of improved public domain and increased built form and density. A number of the recommendations of the Strategy were taken on board in the Stage 1 Master Plan and continued under the Station Precinct Master Plan.

While earmarked for higher density development under that plan, the subject site was denied that opportunity within the final Strategic Planning work (LEP). This Planning proposal seeks to build on that strategic exercise and finalise an appropriate development outcome for the site.



5.9 - Council's Draft Rezoning Discussion Paper

In undertaking the strategic studies required to prepare the exhibited draft of *LEP 2013*, the *Rhodes Masterplan* and *Station Precinct DCP*, Council looked at a number of specific sites and small precincts in terms of re zonings and / or alterations to the applicable development controls. These considerations are documented within various discussion papers and exhibited draft LEPs.

The assessment undertaken by Council was based on the criteria contained within the Department of Planning & Infrastructure Circular for Spot Re zonings (*PS 06-015*). *These remain* appropriate for application to the subject Planning Proposal. The eight criteria and comment thereon relative to this submission are as follows.

1. Will the LEP be compatible with agreed State and Regional strategic direction for development in the area (e.g., land release, strategic corridors, development within 800m of a transit node)

Comment:

This matter was discussed in the relevant sections above, with the proposal considered to be compatible with agreed State and Regional strategic directions for the area. The Planning proposal also seeks to build on the strategic studies previously undertaken for the Station Precinct Master Plan and while proposing greater height and FSR, sits within the objectives set out within those studies.

2. Will the LEP implement studies and strategic work consistent with State and regional policies and Ministerial (s.117) directions

Comment:

As indicated above the proposal is consistent with the Sydney Metro Strategy, the Inner West Sub regional Strategy A Plan for Growing Sydney and the Ministerial (s.117) directions.

3. Is the LEP located in a global/regional city, strategic centre or corridor nominated within the Metropolitan Strategy or other regional/sub-regional strategy?

Comment:

The subject site is located within the Rhodes Town Centre which *A Plan for Growing Sydney* has identified as a regional centre providing greater opportunities for people to work closer to home, with job creation development being fostered in local centres and communities. The capacity of the surrounding area for this form and intensity of development has been acknowledged over a number of years through the Strategic planning work undertaken for the centre.

4. Will the LEP facilitate a permanent employment generating activity or result in a loss of employment lands?

Comment:

The proposal will retain the opportunity for commercial / retail space within the site and provides for an increase in floor space.

5. Will the LEP be compatible/complementary with surrounding land uses?

Comment:

The surrounding area provides a mix of residential, commercial and retail uses in high rise buildings and a major shopping centre. The proposal would provide the opportunity to continue this form of development and will sit well in that context and be compatible in land use terms.

6. Is the LEP likely to create a precedent; or create or change the expectations of the landowner or other landholders?

Comment:

The proposal will not create a precedent, as it does not seek to change the applicable zoning, with the Station Precinct previously being earmarked for development of higher density and scale. The proposed height and FSR can be facilitated within the site, with the proposed built form envelope capable of meeting the criteria contained within *SEPP 65* and the *Apartment Design Guide (ADG)*. It will not alter the expectation of the site's owner or other landowners as to the site's likely re development for mixed - use purposes.



7. Will the LEP deal with a deferred matter in an existing LEP?

Comment:

The land is not deferred under the current Canada Bay LEP being zoned *B4 Mixed Use* and providing for a reduced level of development in terms of Building height and floor space ratio. However, Council removed the opportunity for increased development potential outlined in the *Station Precinct Master Plan* in resolving to proceed with the relevant LEP. That decision was based on land amalgamation issues and not strategic planning matters and effectively deferred the site from the opportunities offered to nearby sites for development uplift.

8. Have the cumulative effects of other spot rezoning proposals in the locality been considered? What was the outcome of these considerations?

Comment:

At the same time as submitting this Planning Proposal another Planning proposal for similar development uplift on an adjacent site, was before Council. It is understood that Planning proposal has been withdrawn.

There are no other criteria under which site - specific re zonings need to be considered


6. CONCLUSION

This submission is provided to Council to assist in its consideration of the Planning Proposal seeking to ensure that the future use of the site is undertaken in both an economically viable manner and within the land's environmental capacity. The assessment undertaken has highlighted a number of relevant issues dealt with under various specialist assessments and reports. In our view the suggested planning controls and built form outcome will ensure that there will be no unreasonable impacts from the site's redevelopment.

At this stage the proponent is seeking support in principle to the proposition, with a view to moving forward and entering the costly stage of further design development as part of a subsequent Development Application. The concept building footprints and envelopes provide a built form outline capable of further refinement and incorporation of detailed consideration of traffic and other servicing requirements. It has been derived in conjunction with Council and is reflective of the Council resolution at its meeting on 15 May, 2018

The information provided in this report confirms that the proposal is <u>consistent</u> with the relevant *S117 Directions, State Environmental Planning Policies*, the *draft Inner West Sub Regional Strategy*, the *Metropolitan Plan for Sydney 2036*, the *draft Metropolitan Strategy for Sydney 2031* and *A Plan for Growing Sydney (2018)*. All of these plans and strategies note the value of increasing residential development close to existing centres and transport nodes, both of which the current proposal is consistent with.

It is considered that the Planning Proposal as outlined in this submission provides the basis for an appropriate vehicle for the variation to the relevant Planning Framework. Such a change will facilitate a viable mixed use redevelopment of the land, providing additional housing choice and an increase in commercial / retail service opportunities within the Rhodes Centre and close proximity to the Railway station.

David Furlong - BTP, MPIA

Director

APPENDIX A

CONCEPT PLANS

(NOTE: Incomplete Set - Guide ONLY for PP)





STATIC

Site Plan



Level 00 - Lower Ground Floor

















Levels 5 – 27 (Typical)









Height Comparison





Elevations





STREET

MARY



<u>NOTES</u>

TN

NO BOUNDARY SURVEY HAS BEEN UNDERTAKEN. BEARINGS, DIMENSIONS AND AREAS ARE FROM TITLE ONLY AND ARE SUBJECT TO CONFIRMATION BY BOUNDARY SURVEY.

DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE DETAIL FROM THE DRAWING. SURVEYOR MUST BE CONTACTED IF THERE ARE ANY DISCREPANCIES.

SERVICES SHOWN ARE INDICATIVE ONLY. POSITIONS ARE BASED ON SURFACE INDICATOR(S) LOCATED DURING FIELD SURVEY. CONFIRMATION OF THE EXACT POSITION SHOULD BE MADE PRIOR TO ANY EXCAVATION WORK. OTHER SERVICES MAY EXIST WHICH ARE NOT SHOWN.

LEVELS ARE BASED ON AUSTRALIAN HEIGHT DATUM (A.H.D.) USING SSM 153294 R.L. 12.32m.

RIDGE & GUTTERS HEIGHTS HAVE BEEN OBTAINED BY INDIRECT METHOD AND ARE ACCURATE TO ± 0.05 m

ADJOINING DWELLINGS, BUILDING HAVE BEEN PLOTTED FOR DIAGRAMMATIC PURPOSES ONLY.

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PP-004	LEVEL 02
PP-005	LEVEL 03
PP-006	LEVEL 04
PP-007	LEVELS 05-27 TYPICAL
PP-008	LEVELS 28-36 TYPICAL
PP-009	NORTH AND SOUTH ELEVATIONS
PP-010	EAST AND WEST ELEVATIONS
PP-011	SECTION
PP-012	TYPICAL LAYOUT PLANS
PP-013	CROSS VENTILATION DIAGRAM
PP-014	SOLAR ACCESS DIAGRAMS
PP-030	GFA & UNIT MIX SCHEDULE

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GFA & UNIT MIX SCHEDULE

GFA SCHEDULE

Site Area	2902m²
Total GFA (m²) Residential Commercial Retail	37900m² 32751m² 2368m² 2781m²
Public Open Space (Cnr of Marquet and Mary St)	343m ²
Floor Space Ratio Residential Commercial Retail	13.06 : 1 11.3 : 1 0.82 : 1 0.96 : 1
GFA Per Residential Level (Excludes Balconies & Winter Gardens)	892m²

UNIT MIX SCHEDULE

Unit Mix	1B/ST	2B	3B
Level 4	2	6	0
Levels 5-27	69	138	23
Levels 28-36	22	61	9
Total Per Unit Type	93 (28%)	205 (62%)	32 (10%)
TOTAL NO. UNITS	330		

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PROPOSED HELIOSTAT

PLANT ROOM

MAX HEIGHT 127m

36

35

34

33



1 BEDROOM INTERNAL AREA: 56m² EXTERNAL AREA: 8m²



2 BEDROOM INTERNAL AREA: 83m² EXTERNAL AREA: 13m² 3 BEDROOM INTERNAL AREA: 105m² EXTERNAL AREA: 12m²

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GFA & UNIT MIX SCHEDULE

GFA SCHEDULE

Site Area	2902m ²
Total GFA (m²) Residential Commercial Retail	37900m² 32751m² 2368m² 2781m²
Public Open Space (Cnr of Marquet and Mary St)	343m ²
Floor Space Ratio Residential Commercial Retail	13.06 : 1 11.3 : 1 0.82 : 1 0.96 : 1
GFA Per Residential Level (Excludes Balconies & Winter Gardens)	892m²

UNIT MIX SCHEDULE

Unit Mix	1B/ST	2B	3B
Level 4	2	6	0
Levels 5-27	69	138	23
Levels 28-36	22	61	9
Total Per Unit Type	93 (28%)	205 (62%)	32 (10%)
TOTAL NO. UNITS	330		

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DESIGN VERIFICATION STATEMENT

KOICHI TAKADA ARCHITECTS

LETTER

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Nominated Architect::

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Royal Australian Institute of Architects 25286

Royal Institute of British Architects

Koichi Takada NSW Architects 6901

1041159

E info@koichitakada.com

15th June 2018

The General Manager City of Canada Bay Council 1A Marlborough Street Drummoyne, NSW 2047

RE: Design Verification Statement – 1 Marquet Street and 4 Mary Street, Rhodes, Planning Proposal

To whom it may concern,

Pursuant to Clause 50 (1A of the Environmental Planning and Assessment Regulation 2000, I hereby declare that I am a qualified architect and registered as an architect in accordance with The Architects Act 2003 as defined by Clause 3 of the Environmental Planning and Assessment Regulation 2000.

I directed the design of the mixed-use development at 1 Marquet and 4 Mary Street, Rhodes. As detailed in the following pages, I confirm that the design achieves the quality principles set out in Schedule 1 – Design Quality Principles of the State Environmental Planning Policy No.65 – Design Quality of Residential Apartment Development.

Yours sincerely,

Maria

Koichi Takada Nominated Architect NSW Architects No. 6901

1 Marquet Street & 4 Mary Street, Rhodes - Introduction

Koichi Takada Architect's design for 1 Marquet Street & 4 Mary Street, Rhodes focuses on providing a building that creates a harmonious relationship between architecture and the public domain. The proposal provides an iconic addition to the new Rhodes Station Precinct.

The building form creates a gentle and responsive transition from the tower to the podium creating a better urban relationship to the through site link by humanising the scale.

The use of wood look profiles along the facade creates a high level of articulation along the entire building length, while a more organic architectural language is featured both at the public domain and the roof feature. The warm and natural material palette is used throughout the building in order to create an intrinsic connection back to nature and a more inviting public domain.

The artfully designed building incorporates a canopy to create a holistic design intent. The canopy over the through site link allows for a seamless transition of indoor and outdoor space and allows for a more active through site link while promoting pedestrian access. The residential units have been designed to provide the residents with a tranquil and private escape from city life. The primary frontages maximise the district outlooks and enhancing available amenity.

The development has been designed with careful consideration to the intent of City of Canada Bay's planning principles, in accordance with the design quality principles set out in the Apartment Design Guide (ADG) and SEPP65 to ensure a high level of public and residential amenity. The design is exciting, innovative, unique and is intended to set a new benchmark for architectural design in Rhodes and beyond.



Location plan

1. Context & Neighbourhood Character

"Good design responds and contributes to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined. It also includes social, economic, health and environmental conditions.

Responding to context involves identifying the desirable elements of an area's existing or future character. Well designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, streetscape and neighbourhood.

The site at 1 Marquet Street and 4 Mary Streets, Rhodes is located within the centre of the Station Precinct (Precinct D) which is located within 100m of Rhodes train station as part of the new transit orientated developments surrounding Rhodes railway station . The site sits within the newly proposed network of active retail laneways which converge into the mid block plaza. The proposed site forms the corner of Marquet and Mary Street boundaries into the new station precinct.

This locale is characterised by a provision of new housing and mixed use zones fronting Walker Street and a part of the network of retail laneways. The site also sits within close proximity to both public infrastructure, a network of open spaces and community facilities.

The site is very well positioned with Rhodes railway station and bus interchange within 100m of the site, and is directly accessible through the continuation of the through site link and pedestrian accessway. Connectivity of the site is further strengthened by means of the nearby Homebush Bay Drive and future proposed bus services along both Mary and Marquet Streets toward Wentworth Point further connect the site to the wider urban context.

With the new community precinct earmarked by the new Connection, and a variety of nearby public open spaces, namely Union Square, Peg Paterson Park and the Rhodes West Foreshore, the proposal is serviced by a multitude of outdoor amenities and makes it an ideal locale for the new proposal.



2. Built Form and Scale

'Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings.

Good design also achieves an appropriate built form for a site and the building's purpose in terms of building alignments, proportions, building type, articulation and the manipulation of building elements.

Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.'

The Planning Proposal defines an envelope that considers the streetscape and wider urban context. Developed in accordance with Canada Bay DCP, and the precinct specific Rhodes West DCP, it has appropriately considered future aspirations for the area.

Streetscape proportions and scale along this new section of Rhodes are consistent in built form. The overall height proposed is 117m to the top of the tower component with the heliostat sitting above.

The height, bulk and scale is generally consistent with the precincts' masterplan for the area as well as the wider context. The development is composed of a primary 14m high podium frontage (4 storey) and a 33 storey tower.

The podium height fronting the corner of Mary and Marquet Streets proposes a semi open public area which will improve sightlines across the corner. The proposed retail at this corner (under the tower) creates a continuous active retail frontage and allows for a continuous transition into the through site link.

3. Density

'Good design achieves a high level of amenity for residents and each apartment, resulting in a density appropriate to the site and its context.

Appropriate densities are consistent with the area's existing or projected population. Appropriate densities can be sustained by existing or proposed infrastructure, public transport, access to jobs, community facilities and the environment.'

The proposed development plays an integral role as part of the precinct and responds accordingly to the availability of infrastructure, transport, demand and environmental quality and adheres to the future desired character of the mixed use zone. The sustainability of the proposed development is further supported by the shift towards a public transport patronage as well as the proposal for the town village centre incorporating a series of interconnected retail laneways into a central public plaza.

Numerous green spaces and new community facilities services the growing local community, this includes recent upgrades to the Rhodes West foreshore areas. The new community precinct earmarked by The Connection is within 250m from the site, this houses event and meeting spaces, a digital library which all surround a central amphitheater.

The concentration of new retail, commercial and residential units is further supported by additional public transport services. New bus service routes to and from Wentworth Point is proposed to divert along both Mary and Marquet Streets, which will service the increased patronage. The promotion of off-road cycleways and bicycle parking nearby key activity hubs as well as the increase of bike and car share services, all assist to minimise car dependency on roads and provide a more sustainable alternative to the increase in population.

The development injects new activity along Marquet and Mary Streets by means of ground floor retail amenity. The viability is enhanced by a continuous retail frontage along Mary Street into the through site connection. The primary residential entry has been located along Marquet Street to allow for a more continuous frontage.

The proposal consists of the following apartment mix. Apartments vary in size and type, from 1 Beds to large 3-Bedroom apartments. This range of units offer a mix of accommodation types and sizes appropriate to the location and support a variety of price points accessible to a range of socio-economic groups.

	STUDIO	1 BD	2 BD	3 BD	Sub Total
Level 4	0	2	6	0	8
Level 5 - 9 (Balconies)	0	15	30	5	50
Levels 10-25	0	48	96	16	160
Level 26-27	4	4	12	2	22
Level 28 - 36	0	18	63	9	90
TOTAL	4	87	207	32	330
PERCENTAGE	1.2%	26.4%	62.7%	9.7%	100%

Apartment mix schedule

4. Sustainability

'Good design combines positive environmental, social and economic outcomes.

Good sustainable design includes use of natural cross ventilation and sunlight for the amenity and liveability of residents and passive thermal design for ventilation, heating and cooling reducing reliance on technology and operation costs. Other elements include recycling and reuse of materials and waste, use of sustainable materials and deep soil zones for groundwater recharge and vegetation.'

The proposed building is designed to satisfy energy and efficiency performance standards. A BASIX assessment will be prepared as part of a Development Application. Further development will occur to achieve verification for water conservation, thermal comfort and energy efficiency.

The layout of the residential levels has been designed to maximise the available solar access by optimising all frontages and extending the glazing to the building line extents. Slight tapering of the corners and stepping of the facade allow for maximum solar penetration into the built form. Positioning of the living spaces has been carefully considered in order to achieve ADG solar compliances, achieving 70% (231/330) direct solar access at the winter solstice. Number of units that achieve no solar access have been minimised to 10% (33/330).

Natural cross ventilation have been maximised across the development by creating two large slots in the centre of the building. Stepping of the facade creates opportunities for greater pressure differentials across opposing faces allowing for further natural ventilation of the units. The proposed achieves 60% natural cross ventilation for the first 9 storeys of the development - 30/48 units.

Careful consideration will be undertaken to the glass type in order to reduce excessive thermal gain. Natural daylight is catered for in the common corridors allowing for a reduction of artificial lighting throughout the day as well as providing greater amenity.

5. Landscape

'Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity. A positive image and contextual fit of well designed developments is achieved by contributing to the landscape character of the streetscape and neighbourhood.

'Good landscape design enhances the development's environmental performance by retaining positive natural features which contribute to the local context, co-ordinating water and soil management, solar access, microclimate, tree canopy, habitat values and preserving green networks. 'Good landscape design optimises useability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity and provides for practical establishment and long term management.'

The opportunities of planting and landscaping have been optimised through the provision of the through site link / laneway connection to the public plaza as well as the proposal of the semi open space to the corner of Mary and Marquet Streets. Both areas will be carefully considered to enhance the public domain through the use of landscaping. This will take into consideration the Rhodes Peninsula Open Space Masterplan in order to create a coherent public domain for the future of Rhodes. This design will be developed during the Development Application.

The design also proposes a central communal open space dedicated for the residents. The space will cater to a variety of uses, both passive and active, and has been positioned to attain optimal solar access through mid winter. Residential amenities on level 3 -(top of podium) including private dining rooms and a cardio/ fitness room which will further utilise the open space. Perimeter raised planter boxes will ensure a green fringing to the podium, while larger planters will be proposed to the northern boundarty to mitigate against any onlooking to the adjacent property.



The landscaped areas are further served through the reserves, parklands and foreshore areas all located within close proximity to the site.

Podium communal open space

6. Amenities

'Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident well being.

Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas and ease of access for all age groups and degrees of mobility'

The proposed development incorporates one bedrrom to three-bedroom apartments providing a varied residential mix. Adaptable units will be provided in accordance with the applicable standards (15% as per Canada Bay DCP) as well as the 20% benchmark incorporating the Liveable Housing Guideline's silver level universal design features.

Dual aspect units are maximised in order to provide the opportunity for natural cross ventilation with 60% (30/48) compliance achieved for the first nine storeys. Units above level 9 have an winter garden arrangement for the private open space, these hybrid spaces are favorable as they both provide weather protection and the adaptability to be open. Due to the high wind velocities of the locale and other prevailing conditions including the acoustic impacts of Syd Enfield Drive, encloseable balconies create a more useable private open space. The incorporation at the higher levels mitigate the increasing wind velocities in the higher portions of the building.

Many of the units cater for a generous area, and exceeds ADG minimum unit sizes. Majority of 1 bedrooms are approximately 59/60m², 2 bedrooms at a minimum of 84m² and 3 bedroom luxury units above 107m². These larger unit types can cater for additional storage above the minimum requirement as well as more generous living and bedrooms. The north, east and west facing apartments are also maximised in order to achieve great solar access with 70% of all apartments achieving a minimum of 2 hours direct solar access while also maximising outlook towards the Canada Bay and beyond.

Landscape buffer zones / perimeter planting are proposed on the podium to address any overlooking onto the adjacent development to the north. While screening and landscaping are used to address visual privacy between the units and the communal open spaces on the podium. Visual and acoustic privacy is further achieved for the residential apartments by adhering to the ADG building separation guidelines.

Access to the ground floor retail amenity has been designed to ensure that all people, regardless of physical ability, are able to access the site. All levels are serviced by a lift with direct access from the basement floor carpark levels. A garbage chute and recycling bin is included in each level for the residential garbage collection.

7. Safety

'Good design optimises safety and security within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety.

A positive relationship between public and private spaces is achieved through clearly defined secure access points and well lit and visible areas that are easily maintained and appropriate to the location and purpose.'

One primary pedestrian entry is proposed and accessed from Marquet Street. The location is proposed away from Mary Street to provide a more continuous and active street frontage and public entry into the retail laneway.

The ground level will be developed to make a visible and attractive entry to the building. The entries will be well lit, naturally during the day, and will have security surveillance and intercoms to identify visitors to the building complex. Access to the basement car parking along Marquet Street is secured by means of a roller shutter at all times.

The floor levels above, both commercial and retail, have glass frontages to the entire perimeter that allow a level of casual surveillance of the surrounding public walkways. Direct access to the lift and stair from the carpark allow residents to drive and enter through a completely secured means.

The ground floor expression, lighting and facade act to invigorate the pedestrian plane while maintaining a level of privacy to the residential lobby spaces. The return of the retail tenancies along Marquet Street on ground floor discourages crime by means of passive surveillance throughout the retail operational hours. The design aims to promote a safe and aesthetically pleasing pedestrian connection along all street frontages and through the retail laneway connection.



Ground floor plan highlighting the residential entry to Marquet Street

8. Housing diversity and Social Interaction

'Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets. Well designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix.

Good design involves practical and flexible features, including different types of communal spaces for a broad range of people and providing opportunities for social interaction among residents.'

The proposed building is designed to respond to the social context in which it is situated and to achieve a range of housing choice to suit a diverse demographic and requirements of its future residents. The new mixed use proposal will contribute positively to the surrounding area, allowing an injection of life into this new precinct and creating the active retail laneways throughout. The design aligns with the desired future character of the locality, and the social needs of the development were considered carefully.

The proposal consists of one, two and three-bedroom apartment types of varying sizes to support a range of socioeconomic groups. The typical apartments aim to attract a variety of owner/occupier and tenants.

The design promotes social interaction between residents through its variety of communal outdoor space. These dynamic spaces are visually appealing but also encourages a place of social interaction by providing a range of activities and uses. The large and grand residential lobby will create a further opportunity for increased social interaction.

With 20% 'liveable' apartments, 15% adaptable apartments and equitable access for people with disabilities, the development addresses accessibility in all elements of the design.

9. Aesthetics

'Good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure. Good design uses a variety of materials, colours and textures.

The visual appearance of a well designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.'

The aesthetics of the proposed development are the result of a close consideration of its local context and the desire future character of the area. These elements were the foundation of the design which informed the nature and articulation of the built form of its bulk, scale, form and materiality.

The main design feature of the building is the dynamic and well considered relationship with the ground floor and public domain. The vertical language and dynamism defines the flow of the building and awning geometry. The facade and stepping formcreates a highly articulated expression worthy of a landmark building but also emphasises the street corner of Marquet and Mary Streets. Curved extrusions and organic forms assist in breaking down the visual bulk and scale of the building.

Materiality and form has been designed to play upon light across the façades, wrapping around the entire perimeter to create a holistic design aesthetic. This articulation of the façade results in a dynamic exterior that catches the subtle changes of light from sunrise to sunset.

The design provides for a building that both enhances the new streetscape and provides an iconic and recognisable addition to the new Station Precinct in Rhodes.



3D visualisation of the Mary street facade



Aeronautical Impact Assessment

Building Development

1 – 9 Marquet & 4 Mary Streets Rhodes, NSW

I-prosperity Waterside Rhodes Pty Ltd

LB00226

Final Version 1.0 19 June 2018



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Version No.	Basis of issue	Author	Issue date	Reviewers
001	Draft report for submission to Client	PWW	18 June 2018	SK
1.0	Final report	PWW	19 June 2018	SK

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Ap	pendi	C – Glossary of Terms and Abbreviations

1 Introduction

1.1 The Development

I-prosperity Waterside Rhodes Pty Ltd has tasked Landrum & Brown Worldwide (Australia) Pty Ltd to prepare an Aeronautical Impact Assessment (AIA) for a proposed building development at 1-9 Marquet & 4 Mary Streets, Rhodes, NSW (the development).

The development comprises a building with a maximum height of 117 m AHD, plus a heliostat above that to a total maximum height of 151.4 m AHD.

Table 1 shows the distances from the development to the various airports in the Sydney Basin and
 Figure 1 maps the development in relation to the nearest of those.

Direction and distance from site
15.3 km southeast
13.7 km southwest
33.4 km northwest
37.2 km northwest
9.4 km northwest
43.5 km southwest

Table 1: Airports in the vicinity



Figure 1: Development site in relation to the closest airports

2 Prescribed Airspace

2.1 Overview

Prescribed Airspace for an airport is the airspace above any part of either an Obstacle Limitation Surface (OLS), a PANS OPS (Procedures for Air Navigation Services – Aircraft Operations) surface, or the Radar Terrain Clearance Chart (RTCC) protection surfaces.

The OLS are conceptual surfaces associated with an airport's runways that are designed to protect aircraft operations from unrestricted obstacle growth. The OLS comprises the following:

- outer horizontal surface (OHS);
- conical surface;
- inner horizontal surface (IHS);
- approach surface;
- inner approach surface;
- transitional surface;
- inner transitional surface;
- baulked landing surface; and
- take-off climb surface.

PANS OPS surfaces are designed around instrument approach and departure flight paths with a prescribed minimum obstacle clearance from structures or terrain. They designate an obstacle-free flight path to enable safe and efficient aircraft operations in Instrument Meteorological Conditions (IMC).

The RTCC provides Air Traffic Control (ATC) with a minimum safe altitude above terrain and obstacles to which they can provide surveillance services to aircraft in the area around major airports.

Infringement by a building or crane into Prescribed Airspace requires the approval of the aerodrome operator, the Civil Aviation Safety Authority (CASA), and the Department of Infrastructure, Regional Development and Cities (DIRDC) where the airport is on federally leased land.

Infringement of PANS OPS or RTCC protection surfaces are not supported by the aviation authorities.

2.2 OLS

The outer segments of the OLS for airports with Type B, 3D instrument approaches, such as Sydney Airport, extend to 15 km from the airport's aerodrome reference point (ARP).

The development site is located 15.3 km from the Sydney Airport ARP and is therefore outside of Sydney Airport's OLS, as shown in **Figure 2**.



Figure 2: Site location shown outside the Sydney Airport OHS boundary (SACL Masterplan 2015)

The development site is located beneath the Outer Horizontal Surface (OHS) of the Bankstown Airport OLS, which is related to a future proposal to provide Type A or B, 3D instrument approaches at Bankstown (see **Figure 3**).

The OHS above this location is at a height of 160 m AHD. The development, to a maximum height of 151.4 m AHD, will not infringe the Bankstown Airport OHS.



Figure 3: Bankstown Airport OLS (Bankstown Airport Masterplan)

The development site is located more than 15 km from any other airport in the Sydney area and is therefore located laterally outside of all OLS, other than Bankstown.

It is also laterally outside the helicopter OLS for Westmead Hospital's helicopter landing sites (HLS).

Airport	Prescribed Airspace Surface	Height of surface (m AHD)	Infringement by development at 151.4 m AHD (in metres)
Sydney	OLS	Laterally Outside	Nil
Bankstown	Outer Horizontal Surface	160	Nil
Westmead Hospital	OLS	Laterally Outside	Nil

Table 2 charts the impact of the development on various Airports' OLS.

 Table 2: Development site impact on the OLS of airports in the vicinity

2.3 PANS OPS

Bankstown and Sydney Airports' PANS OPS surfaces were assessed in detail for this proposed development. All PANS OPS surfaces related to other airports are well above the maximum proposed height of this development.

The lowest PANS OPS protection surface above the development site is related to the 10 nm Minimum Safe Altitude (10nm MSA) for Sydney Airport, at a local height of 335.2 m AHD.

At a maximum height of 151.4 m AHD, the development at 1-9 Marquet & 4 Mary Streets, Rhodes, will not infringe any PANS OPS surfaces for Sydney or Bankstown airports.

Figure 4 depicts Sydney Airport's Master Plan 2015 diagram of the PANS OPS surfaces, with the location of the development marked in red.



Figure 4: PANS OPS Surface Diagram and development site (SACL Masterplan 2015)

2.4 RTCC

The RTCC protection surface was assessed to be at a height of 213 m AHD above the site (see **Figure 5**). At a maximum height of 151.4m AHD, the development will not infringe the RTCC protection surface.



Figure 5: RTCC protection surface (SACL Masterplan 2015)

3 ATC Surveillance System Performance

This assessment identified two radars in relative proximity to the development at 1-9 Marquet & 4 Mary Streets, Rhodes. These are the Sydney Airport Terminal Area Radar (TAR), and the Cecil Park TAR.

The proposed development, at a height of 151.4 m AHD, will not infringe the Sydney Airport TAR clearance plane.

Cranes are considered not to impact the performance of ATC surveillance equipment.

Table 3 confirms the impact of the development on the performance of the ATC Surveillance System Performance with the clearance (in green) or infringement (in red).

Surveillance System	Distance from development (m)	Antenna Elevation (m AHD)	Clearance Plane Elevation at Marquet St Distance x Tan 0.5° + TAR elevation (m)	Result for development height of 151.4 m AHD (m)
Sydney Airport TAR	15885	38.2	176.8	25.4
Cecil Park TAR	23530	200.51	405.8	254.4

 Table 3: Impact of development on ATC Surveillance System Performance

4 Navigation Aid Performance

There are a number of navigation aids installed at Sydney Airport, including ILS, GBAS and DME.

A non-Directional Beacon (NDB) is installed at Bankstown Airport.

The Building Restricted Areas (BRA) describes a sensitive zone that exists to a radius of 3000 m from the navigation aid antenna sites. The building development limitations within the BRA are specified in the Airservices Australia document Navigation Aid Building Restricted Areas and Siting Guidance AEI-7.1613 Issue 2.

Table 4 list the navigation aids and the assessment result in accordance with the BRA documents.

Navigation Aid	Distance from development site (in m)	Result
Sydney Navigation Aids	>10,000	Beyond maximum BRA radius
Bankstown NDB	>10,000	Beyond maximum BRA radius

 Table 4: Navigation Aid Clearance Plane Impacts

5 Roof Top Exhaust Plumes

Exhaust plumes in excess of 4.3 m/s can create sufficient turbulence to upset the stability of aircraft during take-off and landing operations.

Roof top exhaust plume rises in excess of 4.3 m/s must be referred to CASA for their assessment of risk to aircraft operations.

6 Obstacle Lighting

As the proposed building will be taller than 110 m AGL, obstacle lighting for the building, may be required by CASA, in accordance with the Manual of Standards Part 139 – Aerodromes, Chapter 9.4 *Obstacle Lighting*.

Shielding of the lights to avoid distraction to residents may be installed, however the lights must remain visible above a horizontal plane.

7 Cranes

A separate application to SACL should be made at a later date for the construction cranes, once height requirements and duration of operations are known.

8 Helicopter Routes

A Visual Flight Rules (VFR) helicopter route exists from Parramatta to Sydney Heads along the Parramatta River, in an area designated as R405A and R405B.

The development site is located immediately south of the river, adjacent to R405A.

Helicopters operating in this area, and within R405A, navigate by visual reference to the ground and water and are required to maintain a prescribed distance from obstacles and terrain to ensure safe operation.

The development will form a prominent feature in the area, ensuring that pilots can easily see it and avoid it.



Figure 6 depicts the location of the development in relation to R405A.

Figure 6: Development location in relation to R405A (SY VTC - Airservices Australia)

9 Conclusion

The proposed development at 1-9 Marquet & 4 Mary Streets, Rhodes, to a maximum height of 151.4m AHD:

- will not infringe the OLS for Sydney Airport;
- will not infringe the OLS for Bankstown Airport, or any other airport in the vicinity; and
- will not impact the OLS for Westmead Hospital.

Additionally, the development will have no impact on:

- the PANS OPS surfaces for Sydney Airport;
- the PANS OPS surfaces for Bankstown Airport or any other airport in the vicinity;
- the BRA for navigation aids at Sydney Airport;
- the BRA for the NDB at Bankstown Airport;
- the ATC Radar clearance planes; or
- the RTCC protection surface above the site.

Appendix A



Elevation and Site Layout Diagrams

North and South Elevations Source: Forte Sydney Property Group Pty Ltd



East West Elevations Source: Forte Sydney Property Group Pty Ltd



Site Plan Source: Forte Sydney Property Group Pty Ltd

Appendix B

Assessment Methodology

In preparing aeronautical impact assessments associated with airport safeguarding and protection, it is necessary to observe the requirements of the relevant aviation authorities including:

- The Department of Infrastructure, Regional Development and Cities (DIRDC);
- The Civil Aviation Safety Authority of Australia (CASA);
- Airservices Australia (ASA);
- Airport Operators; and
- Department of Defence where appropriate.

The Airports Act 1996 and Airports (Protection of Airspace) Regulations 1996 prescribes the volumes of airspace surrounding Federally Leased Airports that protect aircraft operations into those airports, in order to ensure the safety and regularity of airline and other flight operations.

Sydney Airport's Prescribed Airspace comprises:

- Obstacle Limitation Surfaces (OLS) that restrict obstacle growth in the vicinity of takeoff and landing paths; and
- PANS OPS surfaces that provide a buffer between flight paths and terrain or obstacles.

Relevant Acts and Regulations applicable to developments near airports and air traffic routes were referenced during this assessment.

The major relevant documents include:

- The Airports Act 1996, Airports (Protection of Airspace) Regulations 1996;
- Civil Aviation Safety Regulation (CASR) Part 139 Manual of Standards Aerodromes;
- Aeronautical Information Publication (AIP);
- Airservices Australia's Airways Engineering Instruction Navigation Aid Building Restricted Areas and Siting Guidance (BRA);
- International Civil Aviation Organisation (ICAO) DOC 8168 Procedures for Air Navigation Aircraft Operations (PANS OPS).

A Glossary of Aeronautical Terms and Abbreviations is shown at Appendix C.

Appendix C

Glossary of Aeronautical Terms and Abbreviations

To facilitate the understanding of aviation terminology used in this report, the following is a glossary of terms and acronyms that are commonly used in aeronautical impact assessments and similar aeronautical studies.

Advisory Circulars (AC) are issued by CASA and are intended to provide recommendations and guidance to illustrate a means, but not necessarily the only means, of complying with the *Regulations*.

Aeronautical Information Publication (AIP) is a publication promulgated to provide operators with aeronautical information of a lasting character essential to air navigation. It contains details of regulations, procedures and other information pertinent to flying and operation of aircraft within the applicable country. AIP Australia is produced by Airservices Australia under contract to CASA.

Aeronautical study is a tool used to review aerodrome and airspace processes and procedures to ensure that safety criteria are appropriate.

Air routes exist between navigation aids or waypoints to facilitate the regular and safe flow of aircraft operating under the IFR.

Airservices Australia (ASA) is the Australian government-owned corporation Air Navigation Service Provider (ANSP) providing safe, secure, efficient and environmentally sound air traffic management and related airside services including telecommunications, aeronautical data, navigation services and aviation rescue and firefighting services to the aviation industry within the Australian flight information region.

Air Traffic Control (ATC) service is a service provided in controlled airspace for the purpose of preventing collisions between aircraft and between aircraft and obstructions on the manoeuvring area of controlled aerodromes whilst maintaining an expeditious and orderly flow of air traffic.

Altitude is the vertical distance of a level, a point or an object, considered as a point, measured from mean sea level.

Area navigation (RNAV) is a method of navigation which permits aircraft operation on any desired flight path within the coverage of the station-referenced navigation aids or within the limits of the capability of self-contained aids, or a combination of these.

Circling approach is an extension of an instrument approach procedure which provides for visual circling of the aerodrome prior to landing.

Civil Aviation Safety Authority (CASA) is the Australian government authority responsible under the *Civil Aviation Act 1988* for developing and promulgating appropriate, clear and concise aviation safety standards. As Australia is a signatory to the ICAO *Chicago Convention,* CASA adopts the standards and recommended practices established by ICAO, except where a difference has been notified.

Civil Aviation Safety Regulations (CASR) are promulgated by CASA and establish the regulatory framework (*Regulations*) within which all service providers must operate.

Civil Aviation Act 1988 (the Act) establishes the CASA with functions relating to civil aviation, in particular the safety of civil aviation and for related purposes.

Decision altitude (DA) or decision height (DH) is a specified altitude or height in a 3D instrument approach operation at which a missed approach must be initiated if the required visual reference to continue the approach has not been established. *Note— Decision altitude (DA) is referenced to mean sea level and decision height (DH) is referenced to the threshold elevation.*

Elevation: The vertical distance of a point or a level, on or affixed to the surface of the earth, measured from mean sea level.

Height: The vertical distance of a level, a point or an object considered as a point, measured from a specified datum.

Instrument Flight Rules (IFR) are rules applicable to the conduct of flight under IMC. IFR are established to govern flight under conditions in which flight by outside visual reference is not available due to cloud cover or restricted visibility. IFR flight depends upon a qualified instrument rated pilot flying by reference to instruments located in the flight deck. Navigation is accomplished by reference to electronic signals. It is also referred to as, "a term used by pilots and controllers to indicate the type of flight plan an aircraft is flying," such as an IFR or VFR flight plan. IFR flights can and do regularly operate in VMC but remain an IFR flight for rule and ATC requirements. Regular Public Transport flights are required to file an IFR flight plan, irrespective of the weather conditions.

Instrument Meteorological Conditions (IMC) are meteorological conditions that are less than the minimum specified for visual meteorological conditions.

International Civil Aviation Organization (ICAO) is an agency of the United Nations which codifies the principles and techniques of international air navigation and fosters the planning and development of international air transport to ensure safe and orderly growth. The ICAO Council adopts standards and recommended practices concerning air navigation, its infrastructure, flight inspection, prevention of unlawful interference, and facilitation of border-crossing procedures for international civil aviation. In addition, the ICAO defines the protocols for air accident investigation followed by transport safety authorities in countries signatory to the Convention on International Civil Aviation, commonly known as the *Chicago Convention*. Australia is a signatory to the *Chicago Convention*.

Lowest Safe Altitude (LSALT) are published for each low level air route segment. Their purpose is to allow pilots of aircraft that suffer a system failure to descend to the LSALT to ensure terrain or obstacle clearance in IMC where the pilot cannot see the terrain or obstacles due to cloud or poor visibility conditions. It is an altitude that is at least 1,000 feet above any obstacle or terrain within a defined safety buffer region around a particular route that a pilot might fly.

Manual of Standards (MOS) comprises specifications (Standards) prescribed by CASA, of uniform application, determined to be necessary for the safety of air navigation in relation to a particular segment of the aviation regulations. For example, MOS 139 relates to CASR Part 139 – Aerodromes.

Minimum descent altitude (MDA) or minimum descent height (MDH): A specified altitude or height in a 2D instrument approach operation or circling approach operation below which descent must not be made without the required visual reference. Note: Minimum descent altitude (MDA) is referenced to mean sea level and minimum descent height (MDH) is referenced to the aerodrome elevation or to the threshold elevation if that is more than 2 m (7 ft) below the aerodrome elevation. A minimum descent height for a circling approach is referenced to the aerodrome elevation.

Minimum Obstacle Clearance (MOC) is the minimum distance above an obstacle or terrain that aircraft conducting instrument approach or departure procedures are not allowed to fly below in IMC. The MOC varies depending on the distance from the runway or in mountainous areas.
Notices to Airmen (NOTAMs) are notices issued by the NOTAM office containing information or instruction concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to persons concerned with flight operations.

Obstacles: All fixed (whether temporary or permanent) and mobile objects, or parts thereof, that are located on an area intended for the surface movement of aircraft or that extend above a defined surface intended to protect aircraft in flight.

Obstacle assessment surface (OAS) is a defined surface intended for the purpose of determining those obstacles to be considered in the calculation of obstacle clearance altitude/height for a specific APV or precision approach procedure.

Obstacle Limitation Surfaces (OLS) are a series of planes associated with each runway at an aerodrome that defines the desirable limits to which objects may project into the airspace around the aerodrome so that aircraft operations may be conducted safely.

Prescribed airspace is an airspace specified in, or ascertained in accordance with, the Regulations, where it is in the interests of the safety, efficiency or regularity of existing or future air transport operations into or out of an airport for the airspace to be protected. The prescribed airspace for an airport is the airspace above any part of either an OLS or a PANS OPS surface for the airport and airspace declared in a declaration relating to the airport.

Procedures for Air Navigation Services - Aircraft Operations (PANS-OPS) is an ICAO term denominating rules for designing instrument approach and departure procedures. Such procedures are used to allow aircraft to land and take off under Instrument Meteorological Conditions (IMC) using the Instrument Flight Rules (IFR). ICAO document 8168-OPS/611 (volumes 1 and 2) outlines the principles for airspace protection and procedure design which all ICAO signatory states must adhere to. The regulatory material surrounding PANS-OPS may vary from country to country.

PANS OPS Surfaces: Similar to an Obstacle Limitation Surface, the PANS-OPS protection surfaces are imaginary surfaces in space, below the nominal flight path of the aircraft, which guarantee a certain minimum obstacle clearance above the ground or man-made obstacles. These surfaces may be used as a tool for local governments in assessing building development. Where buildings may (under certain circumstances) be permitted to penetrate the OLS, they cannot be permitted to penetrate any PANS-OPS surface, because the purpose of these surfaces is to guarantee pilots operating in IMC an obstacle free descent or climb path for a given approach, holding procedure or departure.

Regulations refer to the Civil Aviation Safety Regulations

Threshold (THR): The beginning of that portion of the runway usable for landing.

Visual Flight Rules (VFR) are rules applicable to the conduct of flights that are only permitted in VMC due to aircraft equipment and pilot qualifications. The visual flight rules allow a pilot to operate an aircraft in weather conditions that allow the pilot to navigate by visual reference to the ground or water by maintaining visual contact with the terrain and obstacle environment in order to be able to see and avoid other aircraft, terrain, obstacles or other hazards. Specifically, the weather must be equal to or better than basic VFR weather minima. If the weather is worse than VFR minima, IFR qualified pilots operating an IFR qualified aircraft are able to operate under the IFR.

Visual Meteorological Conditions (VMC) are meteorological conditions expressed in terms of visibility, distance from cloud and ceiling, equal or better than specified minima.

Visual Segment Surface (VSS): A PANS-OPS design segment of a straight-in instrument approach procedure, which needs to be monitored and kept clear of any penetrations by obstacles.

Abbreviations

Abbreviations used in this report, and the meanings assigned to them for the purposes of this report are detailed in the following table.

Abbreviation	Meaning
AC	Advisory Circular (document support CAR 1998)
ACFT	Aircraft
AD	Aerodrome
ADS-B	Automatic Dependent Surveillance - Broadcast
AHD	Australian Height Datum
AIP	Aeronautical Information Publication
Airports Act	Airports Act 1996, as amended
AIS	Aeronautical Information Service
ALT	Altitude
AMSL	Above Mean Sea Level
APARs	Airports (Protection of Airspace) Regulations, 1996 as amended
ARP	Aerodrome Reference Point
AsA	Airservices Australia
ATC	Air Traffic Control(ler)
ATM	Air Traffic Management
BARO-VNAV	Barometric Vertical Navigation
BRA	Building Restricted Area
CAO	Civil Aviation Order
CAR	Civil Aviation Regulation
CASA	Civil Aviation Safety Authority
CASR	Civil Aviation Safety Regulation
Cat	Category
DAP	Departure and Approach Procedures (charts published by AsA)
DER	Departure End of (the) Runway
DME	Distance Measuring Equipment
Doc nn	ICAO Document Number nn
DIT	Department of Infrastructure and Transport. (Formerly Dept. of Infrastructure, Transport, Regional Development and Local Government and Department of Transport and Regional Services (DoTARS))
DOTARS	See DIT above
ELEV	Elevation (above mean sea level)
ENE	East North East
ERSA	Enroute Supplement Australia
FAF	Final Approach Fix

Abbreviation	Meaning
FAP	Final Approach Point
FAS	Final Approach Surface of a BARO-VNAV approach
ft	feet
GBAS	Ground Based Augmentation System (satellite precision landing system)
GNSS	Global Navigation Satellite System
GP	Glide Path
IAS	Indicated Airspeed
ICAO	International Civil Aviation Organisation
IHS	Inner Horizontal Surface, an Obstacle Limitation Surface
ILS	Instrument Landing System
ISA	International Standard Atmosphere
km	kilometres
kt	Knot (one nautical mile per hour)
LAT	Latitude
LLZ	Localizer
LONG	Longitude
LNAV	Lateral Navigation criteria
m	metres
MAPt	Missed Approach Point
MDA	Minimum Descent Altitude
MGA94	Map Grid Australia 1994
MOC	Minimum Obstacle Clearance
MOS	Manual of Standards, published by CASA
MSA	Minimum Sector Altitude
MVA	Minimum Vector Altitude
NASAG	National Airports Safeguarding Advisory Group
NDB	Non Directional Beacon
NE	North East
NM	Nautical Mile (= 1.852 km)
nnDME	Distance from the DME (in nautical miles)
NNE	North North East
NOTAM	NOtice to AirMen
OAS	Obstacle Assessment Surface
OCA	Obstacle Clearance Altitude
OCH	Obstacle Clearance Height
OHS	Outer Horizontal Surface
OIS	Obstacle Identification Surface

Abbreviation	Meaning
OLS	Obstacle Limitation Surface
PANS OPS	Procedures for Air Navigation Services – Aircraft Operations, ICAO Doc 8168
PBN	Performance Based Navigation
PRM	Precision Runway Monitor
QNH	An altimeter setting relative to height above mean sea level
REF	Reference
RL	Relative Level
RNAV	aRea NAVigation
RNP	Required Navigation Performance
RPA	Rules and Practices for Aerodromes — replaced by the MOS Part 139 — Aerodromes
RPT	Regular Public Transport
RTCC	Radar Terrain Clearance Chart
RWY	Runway
SFC	Surface
SID	Standard Instrument Departure
SOC	Start Of Climb
STAR	STandard ARrival
SGHAT	Solar Glare Hazard Analysis Tool
TAR	Terminal Approach Radar
TAS	True Air Speed
THR	Threshold (Runway)
TNA	Turn Altitude
TODA	Take-Off Distance Available
VNAV	Vertical Navigation criteria
Vn	aircraft critical Velocity reference
VOR	Very high frequency Omni directional Range
WAC	World Aeronautical Chart

1-9 MARQUET ST AND 4 MARY ST, RHODES

Qualitative Wind Assessment

SLR

Prepared for:

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SLR Ref: 610.16356-R01 Version No: -v1.1 June 2018

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BASIS OF REPORT

This report has been prepared by SLR Consulting Australia Pty Ltd with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with I-Prosperity Waterside Rhodes Pty Ltd ATF I-Prosperity Waterside Rhodes Unit Trust (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

DOCUMENT CONTROL

Reference	Date	Prepared	Checked	Authorised
610.16356-R01-v1.1	18 June 2018	Peter Hayman	Neihad Al-Khalidy	Neihad Al-Khalidy
610.16356-R01-v1.0	14 June 2018	Peter Hayman	Neihad Al-Khalidy	Neihad Al-Khalidy

EXECUTIVE SUMMARY

SLR Consulting Pty Ltd (SLR) has been engaged by I-Prosperity Waterside Rhodes Pty Ltd assess the environmental impact of a proposed development at 1-9 Marquet Street and 4 Mary Street in Rhodes with regard to the wind impact on the publicly accessible outdoor areas in and around the development.

The site is located on the north east corner of the intersection of Marquet and Mary streets in Rhodes.

Rhodes has seen significant development in recent times with relatively new buildings in most directions but with increased density from the south clockwise round to the north. These buildings vary in height from medium to high-rise.

Existing Wind

Existing street level wind conditions in the vicinity of the site could be close to the 16 m/s "walking comfort" criterion for some prevailing wind directions given, the orientation of the site and the spacing of upstream shielding afforded to the site by surrounding buildings and vegetation. In particular adverse winds of more than 16 m/s may occur from the west due to channelling along Mary Street.

Future Wind

In terms of the future wind environment with the proposed development, the following features of the development are noted as being of most significance:

- The winds along the surrounding footpaths may experience adverse wind due to downwash effect or channelling along Mary Street. Additional landscaping and canopies are recommended to protect the footpaths. Awnings or canopies should be added to the main building on the south and west sides to reduce downwash.
- The communal and roof terraces may be subject to high wind speeds. The following recommendations are made to protect exposed areas:
 - Additional landscaping should be added to the level three and four public terraces.
 - $\circ~$ A 1.8 metre balustrade should be added to all level three and four terraces.
 - Awnings or canopies should be added over the west facing private terraces
- The pedestrian link and retail laneways may be subject to high wind speeds due to pressure differences between the windward and leeward sides of the building, it has been recommended that vertical windbreaks be employed. Wind environment will significantly improve if the link is closed on one side to reduce high winds caused by pressure differences on the two sides of the building. This could be in the form of revolving doors or screes or another suitable method. SLR recommends CFD modelling to gain a full understanding of the flow patterns through these areas to provide the most effective mitigation solution.

The above analysis has been made on the basis of our best engineering judgment and on the experience gained from scale model wind tunnel testing and CFD analysis of a range of developments. The conclusions of this SLR report will be quantified using wind tunnel testing during the DA application as per the Council's DCP requirements.



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1 Introduction

SLR Consulting Pty Ltd (SLR) has been engaged by I-Prosperity Waterside Rhodes Pty Ltd to assess the environmental impact of a proposed development at 1-9 Marquet Street and 4 Mary Street in Rhodes with regard to the wind impact on the publicly accessible outdoor areas in and around the development.

SLR previously completed an initial study of the site which is detailed in Letter 610.16356-L01-v1.0 dated 11th April 2016.

1.1 Development Site

The site is located on the north east corner of the intersection of Marquet and Mary streets in Rhodes.

Figure 1 Site Location



Image: Google

1.2 Surrounds

Rhodes has seen significant development in recent times with relatively new buildings in most directions but with increased density from the south clockwise round to the north. These buildings vary in height from medium to high-rise. Rhodes train station is just to the east of the site. There are future high-rise developments planned directly to the north and north east of the site



2 Sydney's Wind Climate

The data of interest in this study are the annual extreme, mean hourly wind speeds and largest gusts experienced throughout the year, how these winds vary with azimuth, and the seasonal break-up of winds into the primary Sydney wind seasons.

2.1 Seasonal Winds

In relation to key characteristics of the Sydney Region Wind Climate (refer wind roses provided in **Appendix A**) relevant to the wind impact assessment of the proposed development, we note that Sydney is affected by two primary wind seasons:

- Summer winds occur mainly from the north-east, south-east and south.
 - While north-east winds are the more common prevailing wind direction (occurring typically as offshore land-sea breezes), south-east and south winds generally provide the strongest gusts during summer.
- Winter/Early Spring winds occur mainly from the west and the south.
 - West quadrant winds (south-west to north-west) provide the strongest winds during winter and in fact for the whole year.

Figure 2Annual Sydney Wind Rose for years 2005-2009



2.2 Wind Exposure at the Site – the "Local" Wind Environment

Close to the ground, the "regional" wind patterns described above are affected by the local terrain and topography.

- The site currently receives some shielding at street level from many directions.
- The site receives little upper level wind shielding in many directions.

3 Wind Acceptability Criteria

3.1 Standard Local Government Criteria

The choice of suitable criteria for evaluating the acceptability of particular Ground Level conditions has been the subject of relatively recent research. The acceptability criteria that have been developed from this research and currently referenced by most Australian Local Government Development Control Plans have been summarised below in **Table 1**.

Table 1 Standard Local Government Wind Acceptability Criteria

Safety	24 m/s	Knockdown in Isolated Areas
	23 m/s	Knockdown in Public Access Areas
Comfort	16 m/s	Comfortable Walking
	13 m/s	Standing, Waiting, Window Shopping
	10 m/s	Dining in Outdoor Restaurant

The primary objectives relating to the above wind impact criteria are as follows:

- The general objective is for annual 3-second gust wind speeds to remain at or below the so-called 16 m/s "Walking Comfort" criterion. Whilst this magnitude may appear somewhat arbitrary, its value represents a level of wind intensity which the majority of the population would find unacceptable for comfortable walking on a regular basis at any particular location.
- In many urban locations, either because of exposure to open water conditions or because of street "canyon" effects, etc., the 16 m/s "Walking Comfort" level may already be currently exceeded. In such instances a new development should ideally not exacerbate existing adverse wind conditions and, wherever feasible and reasonable, ameliorate such conditions.
- It can be seen in **Table 1** that the recommended limiting wind speeds for spaces designed for activities such as seating, outdoor dining, etc., are lower than for "walking comfort".

3.2 Application of Standard Council Wind Criteria

The criteria provided in **Table 1** should not be viewed as *"hard"* numbers as the limiting values were generally derived from subjective assessments of wind acceptability. Such assessments have been found to vary with the height, strength, age, etc., of the pedestrian concerned.

A further factor for consideration is the extent of windy conditions, and some relaxation of the above criteria may be acceptable for small areas under investigation provided the general site satisfies the relevant criteria.



Finally, it is noted that the limiting wind speed criteria in **Table 1** are based on the maximum wind gust occurring (on average) once per year. Winds at all other times, i.e. monthly winds, weekly winds, etc., would be of lesser magnitude. So for example, a location with a maximum annual gust of 10 m/s would experience winds throughout the year of a generally very mild nature, conducive to stationary activities (seating, dining, etc.).

4 Building-Wind Interaction – General Observations

The impact of wind flowing past buildings has well known general impacts at Ground Level – refer to Figure 3:

- **Downwash winds "D"** are the winds which impact on the windward face of a building and are then deflected downwards to Ground Level in a vertical direction
- Accelerating **Shearflow winds "S"** are the winds which experience an acceleration as they pass by the building edges and roof as the wind flow moves around and past the building

In general, the taller the building, the more pronounced the impact on Ground Level winds. Local building details can also influence winds in the immediate vicinity; egg building undercrofts are often associated with local acceleration of winds.

Figure 3 Wind Flow Patterns Past Regular Shaped Buildings





The grouping of buildings can also have an impact on resulting pedestrian winds – refer to Figure 3:

- **Channelling Effect winds "C"** result when there are rows of parallel buildings (especially taller ones) where the gaps in between line up with prevailing wind directions.
- Venturi Effect winds "V" result when wind flow is forced to pass between two converging buildings or groups of buildings with a resulting increase in flow.
- **"Undercroft"** effect is a well-known adverse building-wind characteristic as depicted in the generic building wind effect diagrams shown in **Figure 4.** The winds are induced towards the negative pressure area within the undercroft, creating concentrated adverse wind flow through undercrofts.

Figure 4 Undercroft Winds



Building Undercrofts (left) and Building Cross-Façade Openings (right) can induce concentrated adverse wind flow past and through a building.



5 Wind Impact of the Proposed Development

5.1 Existing Winds – Wind Impact and Effects

Existing street level wind conditions in the vicinity of the site could be close to the 16 m/s "walking comfort" criterion for some prevailing wind directions given, the orientation of the site and the spacing of upstream shielding afforded to the site by surrounding buildings and vegetation. In particular adverse winds of more than 16 m/s may occur from the west due to channelling along Mary Street.

North easterly Winds

There is some shielding available to the northeast provided by a couple of buildings just to the north of the station. In addition, northeast winds are generally mild and the potential therefore for exceedance of the 16 m/s criterion along the pedestrian pathways at the site is small, i.e. occurrences, if any, are likely to be very infrequent.

South Quadrant (South to Southeast) Winds

There is significant shielding from buildings south and south east of site though channelling alond Rider Blvd and accelerations around nearby high-rises could produce local winds above the 16m/s walking comfort criterion.

Westerly Winds

Mary Street runs roughly east-west and winds here could also be close to or exceeding 16m/s walking comfort criterion. Although there will be some shielding from the buildings to the west of the site.

Upper Level Winds

Existing upper level wind conditions at the site are likely to exceed the 16 m/sec *"walking comfort"* criterion for some of the stronger prevailing wind directions (eg south and west)

5.2 Future Winds – Predicted Wind Flow Patterns

The following sections analyse the expected impacts of the proposed development on the pedestrian wind environment in the adjacent streetscape. The wind impact of the proposed development is described by examining the impact of prevailing wind conditions on all public access areas of interest within and external to the development.

The analysis is made on the basis of our best engineering judgement and on the experience gained from model scale wind tunnel testing of a range of developments of similar magnitude to the currently proposed development.

Areas of interest (i.e. surrounding footpaths, primary entry points, internal public access areas, balconies, etc.) are identified in the five figures below



Figure 5 Ground Level



Figure 6 Level 1



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Figure 7 Level 2



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Figure 8 Level 3



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5.2.1 North East Winds

Location	Wind Impact
Pedestrian footpath along Mary Street	 Potential impact here should be less than 16 m/s, affected by: Shielding from upstream buildings. Shielding from development itself. Shielding from existing vegetation.
Pedestrian footpath along Marquet Street	 Potential impact here should be less than 16 m/s, affected by: Shielding from upstream buildings. Shielding from development itself. Shielding from existing vegetation.
Pedestrian Link	 Potential impact here could be close to or exceeding 16 m/s, affected by: Funnelling of winds in to this area. Pressure differences between the windward and leeward sides of the building
Residential Entry and public area	 Potential impact here should be less than 16 m/s, affected by: Shielding from upstream buildings. Shielding from development itself. Shielding from existing vegetation.
Retail Laneway	 Potential impact here could be close to or exceeding 16 m/s, affected by: Funnelling of winds in to this area. Pressure differences between the windward and leeward sides of the building
L2 Retail Laneway	 Potential impact here could be close to or exceeding 16 m/s, affected by: Funnelling of winds in to this area. Pressure differences between the windward and leeward sides of the building
L3 Roof Terrace	 Potential impact here could be close to or exceeding 10 m/s, affected by: Area more exposed to winds Channelling and acceleration of winds between upstream buildings
Communal Terraces	 Potential impact here could be close to or exceeding 10 m/s, affected by: Area more exposed to winds Channelling and acceleration of winds between upstream buildings



Location	Wind Impact
Private Terrace (East)	 Potential impact here could be close to or exceeding 10 m/s, affected by: Area more exposed to winds Channelling and acceleration of winds between upstream buildings
Private Terraces (West)	 Potential impact here should be less than 10 m/s, affected by: Shielding from upstream buildings. Shielding from development itself.
Upper balconies	 Potential impact here could be close to or exceeding 10 m/s, affected by: Stronger upper level winds. Corner balconies like to be more exposed. Some balconies will be shielded by the development itself.

5.2.2 South and South East Winds

Location	Wind Impact
Pedestrian footpath along Mary Street	 Potential impact here should be less than 16 m/s, affected by: Shielding from upstream buildings. Shielding from development itself. Shielding from existing vegetation.
Pedestrian footpath along Marquet Street	 Potential impact here could be close to or exceeding 16 m/s, affected by: Winds channelling along Marquet Street. Lack of vegetation along Marquet Street.
Pedestrian Link	 Potential impact here could be close to or exceeding 16 m/s, affected by: Winds pushing through the retail laneway. Pressure differences between the windward and leeward sides of the building
Residential Entry and public area	 Potential impact here could be close to or exceeding 16 m/s, affected by: Accelerations through the undercroft.
Retail Laneway	 Potential impact here could be close to or exceeding 16 m/s, affected by: Funnelling of winds in to this area. Pressure differences between the windward and leeward sides of the building
L2 Retail Laneway	 Potential impact here could be close to or exceeding 16 m/s, affected by: Funnelling of winds in to this area. Pressure differences between the windward and leeward sides of the building
L3 Roof Terrace	 Potential impact here could be close to or exceeding 10 m/s, affected by: Area more exposed to winds Limited shielding from the retail tenancy to the south and 2A&2B Mary Street
Communal Terraces	 Potential impact here should be less than 10 m/s, affected by: Shielding from upstream buildings. Shielding from development itself.

Location	Wind Impact	
Private Terrace (East)	 Potential impact here could be close to or exceeding 10 m/s, affected by: Area more exposed to winds Channelling and acceleration of winds between upstream buildings 	
Private Terraces (West)	 Potential impact here should be less than 10 m/s, affected by: Shielding from upstream buildings. Shielding from development itself. 	
Upper balconies	 Potential impact here could be close to or exceeding 10 m/s, affected by Stronger upper level winds. Corner balconies like to be more exposed. Some balconies will be shielded by the development itself. 	

5.2.3 Westerly Winds

Location	Wind Impact
Pedestrian footpath along Mary Street	 Potential impact here could be close to or exceeding 16 m/s, affected by: Winds channelling along Mary Street. Lack of vegetation along Mary Street.
Pedestrian footpath along Marquet Street	 Potential impact here could be close to or exceeding 16 m/s, affected by: Downwash from the western façade of the building. Lack of vegetation along Marquet Street.
Pedestrian Link	 Potential impact here should be less than 16 m/s, affected by: Shielding from upstream buildings. Shielding from development itself.
Residential Entry and public area	 Potential impact here could be close to or exceeding 16 m/s, affected by: Accelerations through the undercroft. Channelling along Mary Street
Retail Laneway	 Potential impact here should be less than 16 m/s, affected by: Shielding from upstream buildings. Shielding from development itself.
L2 Retail Laneway	 Potential impact here should be less than 16 m/s, affected by: Shielding from upstream buildings. Shielding from development itself.
L3 Roof Terrace	 Potential impact here should be less than 10 m/s, affected by: Shielding from upstream buildings. Shielding from development itself.
Communal Terraces	 Potential impact here could be close to or exceeding 10 m/s, affected by: Area more exposed to westerly winds Channelling and acceleration of winds between upstream buildings Accelerations around the building itself
Private Terrace (East)	 Potential impact here should be less than 10 m/s, affected by: Shielding from upstream buildings. Shielding from development itself.
Private Terraces (West)	 Potential impact here could be close to or exceeding 10 m/s, affected by: Downwash from the western façade of the building Area more exposed to westerly winds



Location	Wind Impact	
Upper balconies	Potential impact here could be close to or exceeding 10 m/s , affected by	
	Stronger upper level winds.	
	Corner balconies like to be more exposed.	
	• Some balconies will be shielded by the development itself.	



Wind Amelioration Recommendations 6

On the basis of the expected wind impacts outlined in previous section, recommendations for wind break features are made in areas where winds are expected to

• Approach or exceed 10 m/s or 16 m/s depending on the designed use for that area

These wind mitigation recommendations are summarised in Table 2.

Table 2	Recommended Wind Mitigation	
Table 2	Recommended Wind Mitigation	

Location of Interest	Wind Impact Potential	Windbreak Treatment/Recommendation
Pedestrian footpath along Mary Street	High Winds could be close to or exceeding 16m/s for westerly winds. This is an existing condition	 Mitigation Required Additional Street landscaping is recommended.
Pedestrian footpath along Marquet Street	Moderate - High Winds could be close to or exceeding 16m/s for southerly and westerly winds.	 Mitigation Required Additional Street landscaping is recommended. An Awning to mitigate downwash may also be required
Pedestrian Link	High Winds could be close to or exceeding 16m/s for north east and southerly winds	 Mitigation Required Vertical wind break should be employed. Wind environment will significantly improve if one side of the link is closed to prevent pressure differences. This could be in the form of revolving doors, screens or other suitable method to be determined during wind tunnel test and detail design stage.
Residential Entry and public area	Moderate - High Winds could be close to or exceeding 16m/s for southerly and westerly winds.	 Mitigation Required An awning should be extended from the edge of the building above over the public space. Additional landscaping should be added. Planter boxes could be added to create solid barriers.



Location of Interest	Wind Impact Potential	Windbreak Treatment/Recommendation
Retail Laneway	High	Mitigation Required
	Winds could be close to or exceeding 16m/s for north east and southerly winds	 One side of the laneway should be closed to prevent pressure differences. This could be in the form of revolving doors, screens or other suitable method to be determined during wind tunnel test and detail design stage.
L2 Retail Laneway	High	Mitigation Required
	Winds could be close to or exceeding 16m/s for north east and southerly winds	 Vertical wind break should be employed. Wind environment will significantly improve if one side of the link is closed to prevent pressure differences. This could be in the form of revolving doors, screens or other suitable method to be determined during wind tunnel test and detail design stage.
L3 Roof Terrace	High	Mitigation Required
	Winds could be close to or exceeding 10m/s for north east and southerly winds	 A balustrade 1.8 metres high should be added around the perimeter of the area.
		 Additional landscaping should be added.
Communal Terraces	High	Mitigation Required
	Winds could be close to or exceeding 10m/s for north east and westerly winds	 A balustrade 1.8 metres high should be added around the perimeter of the area.
		 Additional landscaping should be added.
Private Terrace (East)	High	Mitigation Required
	Winds could be close to or exceeding 10m/s for north east and southerly winds	 A balustrade 1.8 metres high should be added around the perimeter of the area.
		 An awning should be added over this area.

Location of Interest	Wind Impact Potential	Windbreak Treatment/Recommendation
Private Terraces (West)	High	Mitigation Required
	Winds could be close to or exceeding 10m/s for southerly and westerly winds.	 A balustrade 1.8 metres high should be added around the perimeter of the area.
		 An awning should be added over this area.
Upper balconies	High	Mitigation Required
	Winds could be close to or exceeding 10m/s for all directions.	 Sliding or pull down shutters should be added to corner balconies.





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Figure 11 Mitigation Recommendations Level 1



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Figure 12 Mitigation Recommendations Level 2



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Figure 13 Mitigation Recommendations Level 3

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Report on Preliminary Site Investigation (Contamination)

Proposed Residential Development 1 – 9 Marquet St & 4 Mary St Rhodes

Prepared for Iprosperity Waterside Rhodes Pty Ltd

> Project 86432.00 June 2018



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Report on Preliminary Site Investigation (Contamination) Proposed Residential Development 1 – 9 Marguet St & 4 Mary St, Rhodes

1. Introduction

This report presents the results of a Preliminary Site Investigation (Contamination) undertaken for a proposed residential development at 1 - 9 Marquet Street and 4 Mary Street, Rhodes. The work was commissioned by Iprosperity Waterside Rhodes Pty Ltd, developer of the site.

The project involves the redevelopment of several existing residential lots into a multi-storey residential building with basement parking.

The Preliminary Site Investigation was undertaken to:

- assess the previous land uses and likely subsurface conditions to determine the potential for soil and groundwater contamination on the site;
- provide a preliminary assessment of the suitability of the site for the proposed development; and
- provide general recommendations for additional investigation, if required.

The Preliminary Site Investigation has been prepared to address the requirements of *State Environmental Planning Policy No* 55 – *Remediation of Land*. The overall approach for the Preliminary Site Investigation included a review of available historical information and a walkover assessment of each site. Details of the site history and previous assessments are given in this report, as well as comments on the issues outlined above.

This report has not been specifically prepared for site audit purposes.

2. Site Description

The development sites are located on the north-eastern corner of the intersection of Marquet Street and Mary Street. The six individual lots which currently form the development site are:

- Lot 1 DP 17671 (9 Marquet Street)
- Lot 2 DP 17671 (7 Marquet Street)
- Lot 3 DP 17671 (5 Marquet Street)
- Lot 4 DP 17671 (3 Marquet Street)
- Lot 5 DP 17671 (1 Marquet Street)
- Lot 6 DP 17671 (4 Mary Street)



The total site area is approximately 2900 m².

The areas to the south, east and west have been redeveloped for high-density residential purposes following varying degrees of site remediation. The site immediately to the north is also currently being developed for residential purposes.

At the time of the investigation each of the six lots was occupied by small brick dwellings which appear to have been used for residential purposes, apart from 9 Marquet Street which appears to have also been used as a small mechanic's workshop. All buildings were vacant in preparation for demolition.

The location of each lot is shown on Drawing 1 in Appendix B.

3. Regional Geology and Hydrogeology

The Sydney 1:100 000 Geological Series Sheet indicates that the site is underlain by Ashfield Shale of the Wianamatta Group. This unit typically comprises black to dark grey shale and laminite. The rock weathers to form clayey soils of high plasticity and moderate to high reactivity. An extract from the geological map including topographic contours at 2 m intervals is shown in Figure 1.



Figure 1: Extract from geological map with 2 m surface contours

The groundwater table is likely to be well below the bedrock surface. Near-surface Ashfield Shale generally exhibits low permeabilities which result in very low groundwater yields. Groundwater use from this aquifer is therefore unlikely to be significant. Surface water is likely to follow the surface topography and flow to the west.



4. Scope of Works

The scope of the Preliminary Site Investigation was as follows:

- Review relevant previous investigations by Douglas Partners in the Rhodes area;
- Review various historical documents including aerial photographs, historical title deeds, Section 10.7 certificates, the EPA Contaminated Land register and groundwater bore licences to determine the nature of previous activities that may have occurred on the redevelopment sites;
- Undertake a walkover site inspection of the accessible areas of the redevelopment sites; and
- Provide a Preliminary Site Investigation report which comments on the historical uses of the site, the potential for soil and groundwater contamination to be present, and provides recommendations for follow up action (if required).

5. **Previous Investigations**

Douglas Partners has previously undertaken five projects on nearby sites as follows:

- <u>Project 3648 (1972)</u>: Geotechnical investigation at 23 27 Marquet Street which encountered minor depths of filling (<0.5 m) overlying residual clays and shale bedrock;
- <u>Project 8666 (1984)</u>: Geotechnical investigation at 11 21 Marquet Street which encountered minor depths of filling (<0.5 m) overlying residual clays and shaly clays;
- <u>Project 35568 (2002)</u>: Geotechnical investigation at 18 22 Walker Street which encountered minor depths of filling (<0.5 m) overlying residual clays and shale bedrock;
- <u>Project 73632 (2013)</u>: Preliminary contamination assessment at 34 Walker Street which identified contamination risks as: the presence of filling, industrial practices undertaken on the site, the potential of underground storage tanks being present (although no evidence of such tanks was found) and fallout from adjacent industrial sites; and
- <u>Project 84804</u> (2015): Preliminary Site Investigation for Stage 1 of the Billbergia Station Precinct development which identified the commercial/industrial use of the majority of their site.

In addition to these projects, Douglas Partners has had extensive involvement with the redevelopment of various lots on the former Lednez site to the north of Gauthorpe Street and on the Statewide site on the western side of Marquet Street.



6. Site History

6.1 Aerial Photographs

Aerial photographs from 1930, 1951, 1965, 1982, 1996, 2002 and 2018 were used to assess historical land-use patterns on the redevelopment sites. The 1930 photograph shows that the majority of the sites are vacant and undeveloped. It is possible that a small building is located on 9 Marquet Street, although the exact location of the boundary cannot be determined from the photograph. Significant industrial development has not yet occurred on the surrounding sites.

The 1951 photograph shows that the six dwellings have been constructed. The 1965 photograph shows similar conditions to 1951, although more significant industrial development can be seen to the west and south.

The 1982, 1996, 2002 and 2018 images show similar conditions on the site to the 1965 photograph.

The aerial photographs are attached in Appendix C.

6.2 Historical Land Uses

Historical land title information was obtained for each of the sites to determine the previous ownership. The ownership details are as follows:

- <u>9 Marquet Street</u>: owned by various individuals up to 2017 and I-Prosperity Waterside Rhodes Pty Ltd from 2017 to the present.
- <u>7 Marquet Street</u>: owned by various individuals up to 1951, Timbrol Limited to 1969, CSR Chemicals to 2001, an individual to 2017, and I-Prosperity Waterside Rhodes Pty Ltd from 2017 to the present.
- <u>5 Marquet Street</u>: owned by various individuals up to 2017 and I-Prosperity Waterside Rhodes Pty Ltd from 2017 to the present.
- <u>3 Marquet Street</u>: owned by various individuals up to 1972, CSR Chemicals to 2002, an individual to 2017, and I-Prosperity Waterside Rhodes Pty Ltd from 2017 to the present.
- <u>1 Marquet Street</u>: owned by various individuals up to 2014, B1 Central Pty Ltd to 2016, and I-Prosperity Waterside Rhodes Pty Ltd from 2016 to the present.
- <u>4 Mary Street</u>: owned by various individuals up to 2017 and I-Prosperity Waterside Rhodes Pty Ltd from 2017 to the present.

The title information is attached in Appendix D.



6.3 Section 10.7 Certificates

Section 10.7(2) Planning Certificates (formerly Section 149 Planning Certificates) issued under the *Environmental Planning & Assessment Act 1979* were obtained for each lot from Canada Bay Council. The certificates state that the sites are not significantly contaminated land, and are not the subject of a management order, voluntary management proposal, ongoing maintenance order or a site audit statement under the *Contaminated Land Management Act 1997*.

The planning certificates are included in Appendix E.

6.4 Contaminated Lands Register

A search of the NSW EPA contaminated lands register on 13 June 2018 indicated that the subject sites are not listed as having or have had notices issued under the *Contaminated Lands Management Act 1997*. The following sites have had such notices:

- <u>Walker Street</u>: Allied Feeds site at the northern end of the Rhodes peninsular had seven former notices. This site has recently been developed for residential purposes by Meriton;
- <u>Homebush Bay</u>: the bay floor has one current and four former notices;
- <u>Alfred Street West</u>: Homebush Bay South sediments have one current and 11 former notices;
- Mary Street: Rhodes Waterside (south of Mary Street) had two former notices; and
- <u>Walker Street</u>: The former Lednez/Union Carbide site has six current notices and 48 former notices. This site was remediated by Thiess Services Pty Ltd and has since been redeveloped for residential purposes by various developers.

The majority of these notices relate to Dioxin contamination in the soils on the sites and within the sediments in Homebush Bay as a result of previous industrial activities.

6.5 Licenced Groundwater Bores

A search of the NSW Office of Water database indicated that there are no licenced groundwater wells on the Rhodes peninsular. This indicates that the aquifer is low yielding as previous suggested.



7. Site Inspection

A Principal Engineer visited each of the redevelopment lots on 13 June 2018 to check for the presence of potentially contaminating activities that may have occurred on the site. Observations made on each site are as follows:

- <u>9 Marquet Street</u>: the site is occupied by a single storey brick dwelling in the western portion and a small workshop in the eastern portion. Concrete hardstand areas cover the majority of the site. The workshop appears to have been used for servicing light vehicles.
- <u>7 Marquet Street</u>: the site is occupied by a single storey brick dwelling in the western portion. The remainder of the site is typically grassed.
- <u>5 Marquet Street</u>: the site is occupied by a single storey brick dwelling in the western portion and small garage to the south-east of the dwelling. The remainder of the site is typically grassed.
- <u>3 Marquet Street</u>: the site is occupied by a single storey brick dwelling in the western portion and small carport to the south-east of the dwelling. The remainder of the site is typically grassed.
- <u>1 Marquet Street</u>: the site is occupied by a single storey brick dwelling in the western portion. The remainder of the site is typically grassed.
- <u>4 Mary Street</u>: the site is occupied by a single storey brick dwelling in the southern portion and small carport/garage structures near the northern boundary. The remainder of the site is typically grassed.

Photographs taken at the time of the inspections are provided in Appendix F.

8. Initial Conceptual Site Model

The site history information indicates that the six lots that form the redevelopment site have been used for residential purposes since they were initially developed in the mid-20th Century. The northern-most lot (9 Marquet Street) has also been used as a mechanic's workshop, although the limited space on the site would suggest that this was limited to servicing and repair of light passenger vehicles. Although two lots (3 and 7 Marquet Street) were owned by chemical companies (Timbrol and CSR Chemicals), it is more likely that they were used as staff residences rather than for the manufacture or storage of chemicals.

On the basis of the information detailed in this report, potentially contaminating activities that may have occurred, or may still occur, on the site are as follows:

- The placement of filling, although this is likely to be localised;
- Contaminants associated with the incineration of site-generated waste which is known to have been widespread in Sydney throughout the early and mid-20th Century (e.g. polycyclic aromatic hydrocarbons (PAHs) in ash, charcoal, slag etc.);
- The future demolition of structures which are likely to include hazardous building materials (e.g. asbestos, lead-based paint, synthetic material fibres etc.);



- Contaminants associated with maintenance of the buildings on the site (e.g. pesticides and herbicides);
- Contaminants associated with car maintenance activities (e.g. hydrocarbons, solvents etc.);
- Particulates associated with fall out of chemical components from manufacturing and site remediation works that have previously been undertaken on surrounding sites; and
- Naturally occurring elements in the soils and rock underlying the site (e.g. heavy metals).

The regional groundwater table is likely to be at significant depth. The use of groundwater within the development is considered unlikely. The quality of the groundwater from a land-use perspective will therefore only be of significance if volatile contaminants are present.

Soil vapour intrusion and/or ground gas will only need to be considered if significant concentrations of volatile organic compounds are encountered on the site.

The human receptors to soil contamination are likely to be the residents and visitors to the redeveloped site. Construction personnel, nearby workers/residents and the general public may also be receptors during the construction phase of the redevelopment project.

The ecological receptors are likely to be limited to the flora and fauna that grow/live on the adjacent sites. The area is not known to be ecologically significant.

Exposure pathways are expected to be limited to dermal contact with soils on the site by humans, ingestion of soils and vegetation by fauna, and phytotoxic exposure to flora.

9. Conclusions and Recommendations

The site history information indicates that each lot on the development site has been occupied by residential dwellings since the mid-20th Century, although one lot was also used as a mechanic's workshop. Four of the sites were owned by individuals and two were owned by the chemical companies (Timbrol, CSR Chemicals) that had manufacturing operations elsewhere in Rhodes. It appears as though the dwellings may have been used as staff residences rather than for chemical manufacturing or storage.

The previous geotechnical investigations undertaken by Douglas Partners on adjacent sites suggest that only minor filling is present on the site, overlying residual clayey soils and shale bedrock. Groundwater is expected to be at considerable depth and the site is up-gradient of the surrounding sites that were used for chemical manufacturing.

The majority of the site is expected to be excavated to form a basement for the new building. As such, any contaminated filling and soil present on the site will probably be removed during construction works. The contaminant concentrations in the filing and soils are therefore more relevant from a waste disposal perspective than a land-use perspective. It is noted, however, that any filling and soils that are required to remain on the site will need to be assessed to determine land-use suitability.



The regional groundwater table is likely to be at considerable depth. The basements will presumably be constructed to prevent access to groundwater/seepage and groundwater is unlikely to be extracted for use during the operational life of the buildings. The quality of the groundwater should therefore not hinder the proposed development or the future use of the site for residential purposes.

On the basis of the results of this Preliminary Site Investigation, it is considered that the redevelopment sites either are suitable or could be made suitable for high-density residential purposes. Further assessment of the filling and soils that will remain on site should be undertaken following demolition of the current buildings. Any materials deemed unsuitable will need to be removed or remediated as part of the construction process.

All materials requiring removal from the site will need to be classified in accordance with *Waste Classification Guidelines* (NSW EPA, 2014). The demolition contractor should ensure that the demolition works are undertaken in an appropriate manner and that cross-contamination of the site does not occur. Removal of asbestos and other hazardous building materials should be undertaken by a suitably licensed contractor and an asbestos clearance certificate provided before waste classification, disposal or site validation is undertaken.

10. Limitations

Douglas Partners (DP) has prepared this report for a proposed development at 1 – 9 Marquet Street and 4 Mary Street, Rhodes, in accordance with our proposal dated 30 May 2018 and subsequent approval to proceed from the client. This report is provided for the use of Iprosperity Waterside Rhodes Pty Ltd for this project only and for the purposes as described in the report. It should not be used by or relied upon for other projects or purposes on the same or other site or by a third party. In preparing this report DP has necessarily relied upon information provided by the client and/or their agents.

All advice provided in this report is based on a desktop assessment. The advice may need to be updated following intrusive investigations.

This report must be read in conjunction with all of the attached and should be kept in its entirety without separation of individual pages or sections. DP cannot be held responsible for interpretations or conclusions made by others unless they are supported by an expressed statement, interpretation, outcome or conclusion stated in this report.

This report, or sections from this report, should not be used as part of a specification for a project, without review and agreement by DP. This is because this report has been written as advice and opinion rather than instructions for construction.

Douglas Partners Pty Ltd

Appendix A

About this Report



Introduction

These notes have been provided to amplify DP's report in regard to classification methods, field procedures and the comments section. Not all are necessarily relevant to all reports.

DP's reports are based on information gained from limited subsurface excavations and sampling, supplemented by knowledge of local geology and experience. For this reason, they must be regarded as interpretive rather than factual documents, limited to some extent by the scope of information on which they rely.

Copyright

This report is the property of Douglas Partners Pty Ltd. The report may only be used for the purpose for which it was commissioned and in accordance with the Conditions of Engagement for the commission supplied at the time of proposal. Unauthorised use of this report in any form whatsoever is prohibited.

Borehole and Test Pit Logs

The borehole and test pit logs presented in this report are an engineering and/or geological interpretation of the subsurface conditions, and their reliability will depend to some extent on frequency of sampling and the method of drilling or excavation. Ideally, continuous undisturbed sampling or core drilling will provide the most reliable assessment, but this is not always practicable or possible to justify on economic grounds. In any case the boreholes and test pits represent only a very small sample of the total subsurface profile.

Interpretation of the information and its application to design and construction should therefore take into account the spacing of boreholes or pits, the frequency of sampling, and the possibility of other than 'straight line' variations between the test locations.

Groundwater

Where groundwater levels are measured in boreholes there are several potential problems, namely:

 In low permeability soils groundwater may enter the hole very slowly or perhaps not at all during the time the hole is left open;

- A localised, perched water table may lead to an erroneous indication of the true water table;
- Water table levels will vary from time to time with seasons or recent weather changes. They may not be the same at the time of construction as are indicated in the report; and
- The use of water or mud as a drilling fluid will mask any groundwater inflow. Water has to be blown out of the hole and drilling mud must first be washed out of the hole if water measurements are to be made.

More reliable measurements can be made by installing standpipes which are read at intervals over several days, or perhaps weeks for low permeability soils. Piezometers, sealed in a particular stratum, may be advisable in low permeability soils or where there may be interference from a perched water table.

Reports

The report has been prepared by qualified personnel, is based on the information obtained from field and laboratory testing, and has been undertaken to current engineering standards of interpretation and analysis. Where the report has been prepared for a specific design proposal, the information and interpretation may not be relevant if the design proposal is changed. If this happens, DP will be pleased to review the report and the sufficiency of the investigation work.

Every care is taken with the report as it relates to interpretation of subsurface conditions, discussion of geotechnical and environmental aspects, and recommendations or suggestions for design and construction. However, DP cannot always anticipate or assume responsibility for:

- Unexpected variations in ground conditions. The potential for this will depend partly on borehole or pit spacing and sampling frequency;
- Changes in policy or interpretations of policy by statutory authorities; or
- The actions of contractors responding to commercial pressures.

If these occur, DP will be pleased to assist with investigations or advice to resolve the matter.

About this Report

Site Anomalies

In the event that conditions encountered on site during construction appear to vary from those which were expected from the information contained in the report, DP requests that it be immediately notified. Most problems are much more readily resolved when conditions are exposed rather than at some later stage, well after the event.

Information for Contractual Purposes

Where information obtained from this report is provided for tendering purposes, it is recommended that all information, including the written report and discussion, be made available. In circumstances where the discussion or comments section is not relevant to the contractual situation, it may be appropriate to prepare a specially edited document. DP would be pleased to assist in this regard and/or to make additional report copies available for contract purposes at a nominal charge.

Site Inspection

The company will always be pleased to provide engineering inspection services for geotechnical and environmental aspects of work to which this report is related. This could range from a site visit to confirm that conditions exposed are as expected, to full time engineering presence on site.

Appendix B

Drawing



Appendix C

Historical Aerial Photographs





Photo 3 - Aerial photograph from 1965



Photo 4 - Aerial photograph from 1982



Historical Aerial PhotographsPROJECT:86432.00Mary/Marquet StreetsPLATE No:2RhodesREV:0CLIENT: Forte Sydney Property GroupDATE:12-Jun-18



Photo 5 - Aerial photograph from 1996



Photo 6 - Aerial photograph from 2002



PROJECT:	86432.00
PLATE No:	3
REV:	0
DATE:	12-Jun-18
	PLATE No: REV:



Photo 7 - Aerial photograph from 2018

Douglas Partners	Historical Aerial Photographs	PROJECT:	86432.00
	Mary/Marquet Streets	PLATE No:	4
Geotechnics Environment Groundwater	Rhodes	REV:	0
	CLIENT: Forte Sydney Property Group	DATE:	12-Jun-18

Appendix D

Historical Land Titles Information



Level 14, 135 King Street, Sydney Sydney 2000 GPO Box 4103 Sydney NSW 2001 DX 967 Sydney

Summary of Owners Report

LRS NSW (Formerly LPI)

Sydney

Address: - Corner Mary and Margaret Street, Rhodes

Description: - Lots 1 to 6 inclusive D.P. 17671

As regards the whole of the subject lands

Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Reference to Title at Acquisition and sale
11.10.1927 (1927 to 1935)	Sarah Isabella Sophia Shepherdson (Married Woman)	Vol 1185 Fol 175 (As regards the part tinted yellow and numbered (1) on the attached cadastre)
11.10.1927 (1927 to 1935)	Sarah Isabella Sophia Shepherdson (Married Woman)	Vol 1962 Fol 221 (As regards the part tinted yellow and numbered (2) on the attached cadastre)
20.08.1927 (1927 to 1935)	Sarah Isabella Sophia Shepherdson (Married Woman)	Vol 1693 Fol 189 (As regards the part tinted yellow and numbered (3) on the attached cadastre)

Search continued as regards Lot 1 D.P. 17671

Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Reference to Title at Acquisition and sale
31.08.1935 (1935 to 1940)	Frank Owen Hedger	Vol 1185 Fol 175 Now Vol 4883 Fol 30
14.03.1940 (1940 to 1940)	Martha Maud Hedger (Widow) Clarence Reginald Cecil Kiel (Company Director) Thomas Gavan Douglas Marshall (Solicitor) (Transmission Application not investigated)	Vol 4883 Fol 30
12.12.1940 (1940 to 1941)	Clarence Reginald Cecil Kiel (Company Director) Thomas Gavan Douglas Marshall (Solicitor) (Section 12 Application not investigated)	Vol 4883 Fol 30
08.12.1941 (1941 to 1950)	Marshall Frederick Charles Wilson (Packer)	Vol 4883 Fol 30
02.11.1950 (1950 to 1955)	Bernadine Maria Minahan (Widow)	Vol 4883 Fol 30
23.06.1955 (1955 to 1957)	Jaroslaw Lesiuk (Machinist Lathe Operator) Tosca Nadia Lesiuk (Married Woman)	Vol 4883 Fol 30
15.05.1957 (1957 to 1958)	Alfred Henry Mitchell (Plant operator) Maisie Josephine Mitchell (Married Woman)	Vol 4883 Fol 30
31.10.1958 (1958 to 1963)	Robert March (Clerk) Fayette March (Married Woman)	Vol 4883 Fol 30
04.10.1963 (1963 to 1975)	James Kitchener Cottle (Railway Employee) Doris Marion Cottle (Married Woman)	Vol 4883 Fol 30 Now Vol 9572 Fol 30



Level 14, 135 King Street, Sydney Sydney 2000 GPO Box 4103 Sydney NSW 2001 DX 967 Sydney

Search continued as regards Lot 1 D.P. 17671

Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Reference to Title at Acquisition and sale
22.01.1975 (1975 to 1991)	Doris Marion Cottle (Widow)	Vol 9572 Fol 30 Now 1/17671
17.10.1991 (1991 to 2004)	Alberto Capul Magsakay Enriqueta Calalag Magsakay	1/17671
25.03.2004 (2004 to 2017)	Alberto Capul Magsakay	1/17671
17.05.2017 (2017 to date)	# I-Prosperity Waterside Rhodes Pty Ltd	1/17671

Denotes Current Registered Proprietor

Lease & Easements: - NIL

Search continued as regards Lot 2 D.P. 17671

Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Reference to Title at Acquisition and sale
31.08.1935 (1935 to 1940)	Frank Owen Hedger	Vol 1185 Fol 175 & Vol 1962 Fol 221 Now Vol 5046 Fol 15
14.03.1940 (1940 to 1940)	Martha Maud Hedger (Widow) Clarence Reginald Cecil Kiel (Company Director) Thomas Gavan Douglas Marshall (Solicitor) (Transmission Application not investigated)	Vol 5046 Fol 15
12.12.1940 (1940 to 1942)	Clarence Reginald Cecil Kiel (Company Director) Thomas Gavan Douglas Marshall (Solicitor) (Section 12 Application not investigated)	Vol 5046 Fol 15
30.01.1942 (1942 to 1942)	Henry James Deakes (Contractor)	Vol 5046 Fol 15
03.09.1942 (1942 to 1951)	Arthur Harold Wallas (Superintendent of Life Insurance)	Vol 5046 Fol 15
14.05.1951 (1951 to 1969)	Timbrol Limited	Vol 5046 Fol 15
17.12.1969 (1969 to 2001)	C.S.R. Chemicals Limited Now Sarkem Pty Limited	Vol 5046 Fol 15 Now 2/17671
29.08.2001 (2001 to 2017)	Angelique Gabrielle Crossley Now Angelique Gabrielle Ristwej	2/17671
17.05.2017 (2017 to date)	# I-Prosperity Waterside Rhodes Pty Ltd	2/17671

Denotes Current Registered Proprietor

Lease & Easements: - NIL



Level 14, 135 King Street, Sydney Sydney 2000 GPO Box 4103 Sydney NSW 2001 DX 967 Sydney

Search continued as regards Lot 3 D.P. 17671

Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Reference to Title at Acquisition and sale
31.08.1935 (1935 to 1940)	Frank Owen Hedger	Vol 1962 Fol 221 Now Vol 5046 Fol 16
14.03.1940 (1940 to 1940)	Martha Maud Hedger (Widow) Clarence Reginald Cecil Kiel (Company Director) Thomas Gavan Douglas Marshall (Solicitor) (Transmission Application not investigated)	Vol 5046 Fol 16
12.12.1940 (1940 to 1942)	Clarence Reginald Cecil Kiel (Company Director) Thomas Gavan Douglas Marshall (Solicitor) (Section 12 Application not investigated)	Vol 5046 Fol 16
07.02.1942 (1942 to 1979)	Robert James Wild (Insurance Officer) Aster Hope Wild (Married Woman)	Vol 5046 Fol 16 Now Vol 5324 Fol 7
17.09.1979 (1979 to 1994)	Eric Geoffrey Wild (Insurance Officer)	Vol 5324 Fol 7 Now 3/17671
07.09.1994 (1994 to 2017)	Ming Jie Lu	3/17671
17.05.2017 (2017 to date)	# I-Prosperity Waterside Rhodes Pty Ltd	3/17671

Denotes Current Registered Proprietor

Lease & Easements: - NIL

Search continued as regards Lot 4 D.P. 17671

Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Reference to Title at Acquisition and sale
31.08.1935 (1935 to 1940)	Frank Owen Hedger	Vol 1962 Fol 221 & Vol 1693 Fol 189 Now Vol 5046 Fol 16
14.03.1940 (1940 to 1940)	Martha Maud Hedger (Widow) Clarence Reginald Cecil Kiel (Company Director) Thomas Gavan Douglas Marshall (Solicitor) (Transmission Application not investigated)	Vol 5046 Fol 16
12.12.1940 (1940 to 1942)	Clarence Reginald Cecil Kiel (Company Director) Thomas Gavan Douglas Marshall (Solicitor) (Section 12 Application not investigated)	Vol 5046 Fol 16
07.03.1942 (1942 to 1972)	Herbert Wroughton Wright (Carpenter)	Vol 5046 Fol 16 Now Vol 5325 Fol 111
21.03.1972 (1972 to 1972)	Dorothy Gertrude Upton (Widow) (Section 93 Application not investigated)	Vol 5325 Fol 111
21.03.1972 (1972 to 2002)	C.S.R. Chemicals Limited Now Sarkem Pty Limited	Vol 5325 Fol 111 Now 4/17671



Search continued as regards Lot 4 D.P. 17671

Level 14, 135 King Street, Sydney Sydney 2000 GPO Box 4103 Sydney NSW 2001 DX 967 Sydney

Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Reference to Title at Acquisition and sale
03.04.2002 (2002 to 2017)	Richard Ristwej Marek Ristwej	4/17671
17.05.2017 (2017 to date)	# I-Prosperity Waterside Rhodes Pty Ltd	4/17671

Denotes Current Registered Proprietor

Lease & Easements: - NIL

Search continued as regards Lot 5 D.P. 17671

Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Reference to Title at Acquisition and sale
31.08.1935 (1935 to 1940)	Frank Owen Hedger	Vol 1693 Fol 189 Now Vol 5046 Fol 16
14.03.1940 (1940 to 1940)	Martha Maud Hedger (Widow) Clarence Reginald Cecil Kiel (Company Director) Thomas Gavan Douglas Marshall (Solicitor) (Transmission Application not investigated)	Vol 5046 Fol 16
12.12.1940 (1940 to 1942)	Clarence Reginald Cecil Kiel (Company Director) Thomas Gavan Douglas Marshall (Solicitor) (Section 12 Application not investigated)	Vol 5046 Fol 16
11.05.1942 (1942 to 1949)	Henry Leo Grant (Grinding Machinist)	Vol 5046 Fol 16 Now Vol 5333 Fol 138
06.05.1949 (1949 to 1950)	Stella Grant (Spinster) (or Stella Josephine Grant)	Vol 5333 Fol 138
25.08.1950 (1950 to 1963)	Benjamin Raymond Trueman (Government Employee) Eliza Maud Trueman (Married Woman)	Vol 5333 Fol 138
06.12.1963 (1963 to 1964)	Ilma Jean Trueman (Spinster) Eric Arthur Trueman (Machinist) (Section 94 Application Not investigated)	Vol 5333 Fol 138
28.01.1964 (1964 to 1964)	Frederick Matthew Grill (Retired) Margaret Grill (Married woman)	Vol 5333 Fol 138
10.06.1964 (1964 to 1965)	Eric William Osmond (Retired) Selena Janet Osmond (Married Woman)	Vol 5333 Fol 138
10.12.1965 (1965 to 1966)	Harold Edward Ladbrook (Storeman)	Vol 5333 Fol 138
10.11.1966 (1966 to 1994)	Harry Hall (Clerk) Beryl Elizabeth Verbina Hall (Married Woman)	Vol 5333 Fol 138 Now 5/17671
21.04.1994 (1994 to 1996)	Beryl Elizabeth Verbina Hall (Widow)	5/17671
22.08.1996 (1996 to 1998)	June Mary Schembri	5/17671
20.01.1998 (1998 to 2014)	Vivienne May Kuklin June Mary Schembri	5/17671



Search continued as regards Lot 5 D.P. 17671

Level 14, 135 King Street, Sydney Sydney 2000 GPO Box 4103 Sydney NSW 2001 DX 967 Sydney

Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Reference to Title at Acquisition and sale
09.10.2014 (2014 to 2014)	Annie Bi	5/17671
24.11.2014 (2014 to 2016)	Bi Central Pty Limited	5/17671
01.12.2016 (2016 to date)	# I-Prosperity Waterside Rhodes Pty Ltd	5/17671

Denotes Current Registered Proprietor

Lease & Easements: - NIL

Search continued as regards Lot 6 D.P. 17671

Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	<u>Reference to Title at</u> <u>Acquisition and sale</u>
31.08.1935 (1935 to 1940)	Frank Owen Hedger	Vol 1185 Fol 175, Vol 1962 Fol 221 & Vol 1693 Fol 189 Now Vol 5046 Fol 16
14.03.1940 (1940 to 1940)	Martha Maud Hedger (Widow) Clarence Reginald Cecil Kiel (Company Director) Thomas Gavan Douglas Marshall (Solicitor) (Transmission Application not investigated)	Vol 5046 Fol 16
12.12.1940 (1940 to 1959)	Clarence Reginald Cecil Kiel (Company Director) Thomas Gavan Douglas Marshall (Solicitor) (Section 12 Application not investigated)	Vol 5046 Fol 16 Now Vol 5333 Fol 142
17.12.1959 (1959 to 1965)	Gustav Riehm (Fitter) Charlotte Riehm (Married Woman)	Vol 5333 Fol 142 Now Vol 7877 Fol 193
24.09.1965 (1965 to 1966)	Jonray (Sydney) Pty Limited	Vol 7877 Fol 193
05.01.1966 (1966 to 1979)	Apostolos Tzioukas (Labourer) Helen Tzioukas (Married Woman)	Vol 7877 Fol 193
02.08.1979 (1979 to 1986)	Salvatore Vella (Retired Labourer)	Vol 7877 Fol 193
08.04.1986 (1986 to 2017)	Nello Casetta Annamaria Casetta	Vol 7877 Fol 193 Now 6/17471
17.05.2017 (2017 to date)	# I-Prosperity Waterside Rhodes Pty Ltd	6/17471

Denotes Current Registered Proprietor

Lease & Easements: - NIL

Yours Sincerely Mark Groll 7 February 2018



Reg:R721447 /Doc:CT 09572-030 CT /Rev:01-Feb-2011 /Sts:OK.SC /Pgs:ALL /Prt:06-Jun-2018 Ref:rhodes /Src:M 14:10 /Seg:1 o£ 09572030 TIFICATE OF TITLE Contest of C. NEW SOUTH WALES PERTY ACT, 1900, as amended. For Grant and title reference 30 9572 prior to first Edition see Deposited Plan Fol Vol 1at Edition issued. 14-1.1-1963 30 J473969 Fol I certify that the person described in the First Schedule is the registered proprietor of the undermentioned estate in the land within described subject nevertheless to such exceptions encumbrances and interests as are shown in the Schedule. **e 1** è-5 Witness Jatson Liheill Registrar-General. SEE AUTU FULIO WARNING: THIS DOCUMENT MUST NOT BE REMOVED FROM THE LAND TITLES OFFICE. PLAN SHOWING LOCATION OF LAND Vol (Page 1) đ Ρ. 3241 Ð. ALTERING OR ADDING TO THIS CERTIFICATE OR ANY NOTIFICATION HEREON 1306 4064% 10 Marguet I i9per. 1306 2 3473969*464* Scale: 80 feet to one inch. AS ESTATE AND LAND REFERRED TO N. Butate in Fee Simple in Lot 1 in Deposited Plan 17671 at Rhodes in the Municipality Concord, Parieb 2 Concord, County Cumberland. tal Registrar General FIRST SCREDULE (continued overleaf) of Rhodes, Ruilway, Rapioyes, and DORIS MARION COTTLE, his Wife, as Joint Tenants. JAMES KITCHENER COTTLE; Jakaon Registrar General. SECOND SCHEDULE (continued overleaf) GRY 1. Reservations and conditions, if any, contained in the Crown Grant(s) referred to in the said Deposited Plan. CV2. Covenant created by Transfer No. C366747. P PERSONS ARE CAUTIONED AGAINST laton Registrar General. NOTE: ENTRIES RULED THROUGH AND AUTHENTICATED BY THE SEAL OF THE REGISTRAR-GENERAL ARE CANCELLED. 3

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NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

FOLIO: 1/17671

First Title(s): SEE PRIOR TITLE(S) Prior Title(s): VOL 9572 FOL 30

Recorded	Number	Type of Instrument	C.T. Issue
21/8/1988		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
11/10/1988		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
17/10/1991	Z993819	DISCHARGE OF MORTGAGE	
17/10/1991		TRANSFER	
17/10/1991		MORTGAGE	EDITION 1
27/3/2001	7408114	DEPARTMENTAL DEALING	
25/3/2004	AA521882	DISCHARGE OF MORTGAGE	
25/3/2004	AA521884	NOTICE OF DEATH	EDITION 2
13/5/2014	AI575190	CAVEAT	
10/8/2015	AJ718132	WITHDRAWAL OF CAVEAT	
30/9/2015	AJ855818	CAVEAT	
27/9/2016	AK790742	CAVEAT	
17/5/2017	AM397691	TRANSFER	EDITION 3
17/5/2017	AM397712	CAVEAT	
28/8/2017 28/8/2017		WITHDRAWAL OF CAVEAT MORTGAGE	EDITION 4

*** END OF SEARCH ***

rhodes

PRINTED ON 6/6/2018

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TRANSFEROR Note (b)	DORIS MARION COTTLE				
ESTATE Noie (c)	(the abovenamed TRANSFEROR) hereby acknowled and transfers an estate in fea simple in the land above described to the TRANSFEREE	dgas receipt of the consider	ation of \$ 140,000-00		
TRANSFEREE Note (d)	ALBERTO CAPUL MACSAKAY of 486 and ENRIQUETA CALALAS MAGSAKA				OFFICE USE ONLY
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(D)	CONSIDERAT	ION The trans	feror acknowledges rec	eipt of the considera	tion of \$ <u>7,3</u>	90,000.00)	and as regards	
(E)	ESTATE	the above	ententioned land trans	fers to the transfere	e an estate	in fee	simple		
(F)	SHARE TRANSFERR		11						
(G) (H)	TRANSFERE		ances (if applicable):						
άų	IRANJFERE	I-Pro	sperity Watersi	de Rhodes Pty	Ltd ACN 6	08 318 75	52		
(1)		TENANO	CY:						
	DATE								
(J)		ealing in my p	itness and that the tran resence.	sferor	Certified cor 1900 by the		ourposes of the Rea	Property Act	
	Signature of		Rage	Suc arrista	Signature of	transferor:	thy	e ,	
	Name of wit Address of v		CI-Swaab Ar 20 Huuter	Horney 1 Streft		0)		
			Sydney ANTONIO D'	AGOSTINO	Certified con	If of the tran	urposes of the Real sferee by the perso		
					Signature:		e	È.	
					Signatory's n Signatory's c		Elvina Li solicitor		
(K)		feree's so	Licitor certific Full name: _		ta relevant to th	-	s been submitted a	nd stored under	
	* s117 RP Ac	t requires that	you must have known		tore than 12 mo		the second s	documentation.	
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NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: 1/17671

LAND

SERVICES

SEARCH DATE	TIME	EDITION NO	DATE
6/6/2018	2:08 PM	4	28/8/2017

LAND ------

LOT 1 IN DEPOSITED PLAN 17671 AT RHODES LOCAL GOVERNMENT AREA CANADA EAY PARISH OF CONCORD COUNTY OF CUMBERLAND TITLE DIAGRAM DP17671

FIRST SCHEDULE

I-PROSPERITY WATERSIDE RHODES PTY LTD

(T AM397691)

SECOND SCHEDULE (3 NOTIFICATIONS)

- 1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT (S)
- 2 C366747 COVENANT
- 3 AM620363 MORTGAGE TO LIYUN LIU

NOTATIONS

UNREGISTERED DEALINGS: R AN341612 TG AN371693.

*** END OF SEARCH ***

Rhodes

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NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE ------6/6/2018 2:09PM

FOLIO: 2/17671

First Title(s): SEE PRIOR TITLE(S)
Prior Title(s): VOL 5046 FOL 15

18/12/1988 TITLE AUTOMATION PROJECT LOT RECORDED 15/6/1989 CONVERTED TO COMPUTER FOLIO FOLIO CREATE CT NOT ISSUE FOLIO CREATE	REATED
14/3/2001 7473016 CHANGE OF NAME EDITION 1	
27/3/2001 7408114 DEPARTMENTAL DEALING	
29/8/2001 7890380 TRANSFER EDITION 2	
16/6/2008 AE20264 CHANGE OF NAME 16/6/2008 AE20265 MORTGAGE EDITION 3	
13/5/2014 AI575192 CAVEAT	
10/8/2015 AJ718135 WITHDRAWAL OF CAVEAT	
30/9/2015 AJ855827 CAVEAT	
27/9/2016 AK790745 CAVEAT	
17/5/2017 AM397651 DISCHARGE OF MORTGAGE	
17/5/2017 AM397652 TRANSFER EDITION 4	
17/5/2017 AM397712 CAVEAT	
28/8/2017AM681006WITHDRAWAL OF CAVEAT28/8/2017AM620363MORTGAGEEDITION 5	

*** END OF SEARCH ***

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Received: 05/06/2018 14:09:31

Ref:r	721455 /Doc:DI hodes /Src:Mov Licence: 98M[1 Edition: 0008	
	STAMP DUTY	Office of State Revenue use only
(A)	TORRENS TITLE	If appropriate, specify the part or share transferred Folio identifier 2/17671
(B)	LODGED BY	Delivery Box Bradfield \Rightarrow Scott CODE 1406 Reference (optional): COSSLEY T
(C)	TRANSFEROR	SARKEM PTY LIMITED (ABN 97 000 075 034)
(D) (E) (F) (G)		The transferor acknowledges receipt of the consideration of \$ 330,000.00 and as regards the land specified above transfers to the transferee an estate in fee simple and the transferee/transferor covenants with the transferor/transferee as fully set out in schedule 1 hereto. Encumbrances (if applicable): 1. 2. 3.
(H)	DATE	ANGELIQUE GABRIELLE CROSSLEY of 64 Ernest Street, Crows Nest NSW 2065
(I) *	Instruction Instruction Instruction Instruction	
-	whose identity Far	msferee, with whom I am personally acquainted or as to motherwise satisfied, signed this transfor in my presence. Certified correct for the purposes of the Real Property Act 1900 by the transferee.
2	Signature of witness	See Annexure "B" for execution by Transferee
	Address of witness	
	All handsvriting ma	Page 1 of <u>5</u> number additional pages sequentially from Land and Property Information NSW.
Req:R721455 /Doc:DL 7890380 /Rev:31-Aug-2001 /Sts:NO.OK /Pgs:ALL /Prt:06-Jun-2018 14:10 /Seq:2 of 6 Ref:rhodes /Src:M

$(J), \quad \text{SCHEDULE 1 TO TRANSFER: TRANSFEREE'S/TRANSFEROR'S COVENANT}$

(K) Dated:

From:

To:

See Annexure "A" for Transferee's Covenant.

(L) Land benefited by covenant: Land burdened by covenant:

(M) Terms of the covenant:

(N) Signature of witness:

Signature of witness:

Achaelejealy Signature of transferor:

Signature of transferee:

Page 2 of _5 _

Req:R721455 /Doc:DL 7890380 /Rev:31-Aug-2001 /Sts:N0.OK /Pgs:ALL /Prt:06-Jun-2018 14:10 /Seq:3 of 6 Ref:rhodes /Src:M

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Annexure A - Transferee's Covenant

1 Servient Land

Upon the registration of this Transfer, the Transferee will become the registered proprietor of Certificate of Title Folio Identifier 2/17671 ("Servient Land").

2 **Dominant Land**

Orica Australia Pty Limited (ABN 99 004 117 828) ("Orica") and the Transferor are the 2.1 registered proprietors of the following titles ("Dominant Land"):

Registered Proprietor	Lot/DP	Folio Identifier
Orica	Lot 1 DP964055	1/964055
Orica	Lot 6 DP736510	6/7365510
Transferor	Lot 6 section 2 DP3241	6/2/3241
Transferor	Lot DP546471	1/546471
Transferor	Lot 3 Section 2 DP3241	3/2/3241
Transferor	Lot 4 Section 2 DP3241	4/2/324[
Transferor	Lot 5 Section 2 DP3241	5/2/3241
Transferor	Lot 87 DP5923	87/5923
Transferor	Lot 88 DP5923	88/5923
Transferor	Lot A DP343097	A/343097
Transferor	Lot B DP343097	B/343097
Transferor	Lot 1 DP651969	1/651969
Transferor	Lot 2 DP571148	2/571148
Transferor	Lot 1 DP440865	1/440865
Transferor	Lot 22 DP624240	22/624240

3 **Definitions**

3.1

For the removal of any doubt, the Transferor and the Transferee agree that for the purposes of this Restrictive Covenant, the following definitions will apply:

Development Application means:

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Page 3 of 6

- (a) any proposed or actual applications to re-zone the Dominant Land which are made by Orica and/or the Transferor; and
- (b) any application to change the use of the Dominant Land; and
- (c) any development applications which Orica or the Transferor or both of them make in relation to the Dominant Land.

Joint Venture Party means McRoss Developments Pty Ltd (ABN 95 001 176 263) with whom Orica or the Transferor or both of them have entered into a joint venture for the purpose of developing, altering, improving and/or profiting from the Dominant Land.

Transferor means the Transferor as described on the front page.

Transferee means the Transferee as described on the front page and includes the Transferee's successors and assigns.

4 Transferee's Covenant

3 °

- 4.1 The Transferee covenants with Orica and the Transferor not to:
 - (a) object to; or
 - (b) appeal in respect of; or
 - (c) cause or permit any objection or appeal to be made on its behalf in respect of; or
 - (d) take any action which may prejudice or affect or result in the imposition of conditions in respect of,

the Development Application.

- 4.2 The Transferee makes the covenant outlined in clause 4.1 with the intent that:
 - (a) the burden will run with and bind the Servient Land and every part thereof; and
 - (b) the benefit will be annexed to and devolve with each and every part of the Dominant Land.

5 Application of Transferee's Covenant

- 5.1 The covenant in clause 4.1, applies regardless of whether any objection or appeal is on the basis of planning, environmental, or any other grounds whatsoever and whether pursuant to planning, land use, environmental, local government or other legislation, rules, by-laws or regulations or otherwise.
- 5.2 Subject to clause 6, the Transferor or Orica are the only parties entitled to release the covenant contained in clause 4.1.

6 Expiration of Restrictive Covenant

The covenant in clause 4.1 expires on the later of:

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Page 4 of 6

Req:R721455 /Doc:DL 7890380 /Rev:31-Aug-2001 /Sts:NO.OK /Pgs:ALL /Prt:06-Jun-2018 14:10 /Seq:5 of 6 Ref:rhodes /Src:M

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- (a) 4 years after the Transferee becomes the registered proprietor of the Servient Land; and
- (b) On the date that Orica and/or the Transferor and/or their Joint Venture Party cease to be the registered proprietor of any part of the Dominant Land.

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Req:R721455 /Doc:DL 7890380 /Rev:31-Aug-2001 /Sts:NO.OK /Pgs:ALL /Prt:06-Jun-2018 14:10 /Seq:6 of 6
Ref:rhodes /Src:M

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50 J. S. M.

Annexure B - Execution

THE COMMON SEAL of SARKEM PTY LIMITED is duly affixed by authority of its directors in the presence of:

Signature of authorised person

Director Office held REYNOLDS AM D. BARBARA GIBSON

Name of authorised person (block letters)

Set

Signature of authorised person

× Secretary Office held

MCHAELA HEALEY Name of authorised person (block letters)

SIGNED, SEALED AND DELIVERED by ANGELIQUE GABRIELLE CROSSLEY in the presence of:

Ś.

Signature of witness

Name of witness (block letters)

Signature of ANGELIQUE **GABRIELLE CROSSLEY**

Page 6 of 6

	7263 /Doc:DL des /Src:M	AM397652 /Rev:19-May-2017 /Sts:SC.00	K /Pgs:ALL /Prt	:07-Jun-2018 12:12	/Seq:1 of 1
	,	\bigcirc			
	Form: 01T Release: 6-1	C TRANS			
		Real Property /	Act 1900	AM39765	
		Section 31B of the Real Property Act 1900 (RP Act) aut the establishment and maintenance of the Rea			
	the Register is m	ade available to any person for search upon paymen	t of a fee, if any.	Office of State Re (NSW)	venue
	STAMP DUTY	Office of State Revenue use only	2(The second	3841
				Duty: \$10 Trans Ho	9073453-00
			1.	Ass: details: 5 8 (2)	
(4)	TORRENS TITLE	2/17671			· ·
107		2/1/6/1			
(B)	LODGED BY	Document Name, Address or DX, Telephone, a	nd Customer Account	t Number if any	CODES
		Collection Goodwin & Co Larrye			
		Box Level S. 15 Castlerday	" Street Sydne	y NSW 2000	
		Reference: 151009 6-1760	107	7113 -000	
(C)	TRANSFEROR	Angelique Gabrielle Ristwej			· · · · · · · · · · · · · · · · · · ·
(D)		The transferor acknowledges receipt of the considera			and as regards
(E)	ESTATE	the abovententioned land transfers to the transfered	e <u>an estate in</u>	fee simple	
(F)	SHARE TRANSFERRED				
(G)		Encumbrances (if applicable):			
(H)	TRANSFEREE	I-Prosperity Waterside Rhodes Pty	Ltd ACN 608 31	18 752	
(J)		TENANCY:			
	DATE	TEURING I.	1-1-11	and the state of the	
(J)		eligible witness and that the transferor	Certified correct fo	or the purposes of the Real	Property Act
(-)		ng in my presence.	1900 by the transfe	eror.	~
	[See note * below	3	Anar	ye 1	~
	Signature of witr	iess:	Signature of transf	feror	1
		- I apr			
	Name of witness	1 Afficie			
	Address of witne	ss: d-Ewad Attencys			÷
		20 Huger Street, Sypt	ney		
		SS: <u>d-Swaah</u> Attencys 20 Huger Smeet, Syd ANTONIO D'AGOSTINO			_
			Certified confect to	r the purposes of the Real he transferee by the persor	
			signature appears b		
			-		
			Signature:	Win	
			Signatory's name:	Elvina Li	
			Signatory's capacit	ly: <u>solicitor</u>	
(K)	The transfer	ee's solicitor certifies that the eNOS da	ta relevant to this dea	ling has been submitted ar	id stored under
	eNOS ID No.				
		quires that you must have known the signatory for n	tore than 12 months o	r have sighted identifying a	
	ALL HANDWRITING	MUST BE IN BLOCK CAPITALS Page 1 of 1			1303

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NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: 2/17671

LAND

SERVICES

SEARCH DATE	TIME	EDITION NO	DATE
6/6/2018	2:08 PM	5	28/8/2017

LAND

LOT 2 IN DEPOSITED PLAN 17671 AT RHODES LOCAL GOVERNMENT AREA CANADA BAY PARISH OF CONCORD COUNTY OF CUMBERLAND TITLE DIAGRAM DP17671

FIRST SCHEDULE

I-PROSPERITY WATERSIDE RHODES PTY LTD

(T AM397652)

SECOND SCHEDULE (4 NOTIFICATIONS)

- RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S) 1
- 2 C366747 COVENANT
- 7890380 COVENANT 3
- AM620363 MORTGAGE TO LIYUN LIU 4

NOTATIONS -----

UNREGISTERED DEALINGS: R AN341612 TG AN371693.

*** END OF SEARCH ***

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NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE ------6/6/2018 2:09PM

FOLIO: 3/17671

First Title(s): SEE PRIOR TITLE(S) Prior Title(s): VOL 5324 FOL 7

Recorded	Number	Type of Instrument	C.T. Issue
18/12/1988		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
4/7/1989		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
7/9/1994	U595712	TRANSFER	
7/9/1994	U59 5713	MORTGAGE	EDITION 1
17/11/1997	3584365	DISCHARGE OF MORTGAGE	
17/11/1997	3584366	MORTGAGE	EDITION 2
24/2/1999	5626556	MORTGAGE	EDITION 3
20/7/1999	6005069	DEPARTMENTAL DEALING	
27/3/2001	7408114	DEPARTMENTAL DEALING	
12/3/2013	AH604511	DISCHARGE OF MORTGAGE	EDITION 4
13/5/2014	A1575193	CAVEAT	
10/8/2015	AJ718136	WITHDRAWAL OF CAVEAT	
30/9/2015	AJ855824	CAVEAT	
27/9/2016	ak790756	CAVEAT	
17/5/2017	AM397667	TRANSFER	EDITION 5
17/5/2017	AM397712	CAVEAT	
28/8/2017	AM681006	WITHDRAWAL OF CAVEAT	
28/8/2017	AM620363	MORTGAGE	EDITION 6

*** END OF SEARCH ***

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	RP13	U TRANSFER December 19 Act, 1960			
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	=:	0+010+ 1806 31 +01558183103 EHb \$5"00			
(A)	LAND TRANSFERRED Show no more than 20 References to Title. If appropriate, specify the share transferred.	FOLIO IDENTIFIER 3/17671			
(B)	LODGED BY	L.T.O. Box Name, Address or DX and Telephone			
		232 REFERENCE (max. 15 during 15 dur			
6	TRANSFEROR	-ERIC GEOPFRY WILD			
(D)	acknowledges receipt of the consideration				
(E)	subject to the following ENCUMBRANCE				
(F) (G)	Suit	g Jie Lug te A, 1st Floor , Burwood Road , NSW 2134 cs joint tencents/tencents in common			
(H)	We certify this dealing correct for the purp				
	Signed in my presence by the transferor w MMM Signature of Witness SUS AND WILD Nume of Witness (BLOCK LETTE 317 A OLD NOK THEE Address of Witness (S A	RS)			
	Signed in my presence by the transferee who is personally known to me.				
	Signature of Witness				
	Name of Witness (BLOCK LETTE				
	Address of Winess	Solicitor for Transferee Signature of Transferee			
u ar i	INSTRUCTIONS FOR FILLING OUT THIS FORM AS	S.B.Dalla & Associates RE AVAILABLE FROM THE LAND TITLES OFFICE CHECKED BY (office use only)			





NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: 3/17671

LAND

SERVICES

SEARCH DATE	TIME	EDITION NO	DATE
6/6/2018	2:08 PM	6	28/8/2017

LAND

LOT 3 IN DEPOSITED PLAN 17671 AT RHODES LOCAL GOVERNMENT AREA CANADA BAY PARISH OF CONCORD COUNTY OF CUMBERLAND TITLE DIAGRAM DP17671

FIRST SCHEDULE

I-PROSPERITY WATERSIDE RHODES PTY LTD

(T AM397667)

SECOND SCHEDULE (3 NOTIFICATIONS)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)

- 2 C366747 COVENANT
- 3 AM620363 MORTGAGE TO LIYUN LIU

NOTATIONS

UNREGISTERED DEALINGS: R AN341612 TG AN371693.

*** END OF SEARCH ***

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Historical Title



NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE ------6/6/2018 2:09PM

FOLIO: 4/17671

First Title(s): SEE PRIOR TITLE(S) Prior Title(s): VOL 5325 FOL 111

Recorded	Number	Type of Instrument	C.T. Issue
18/12/1988		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
7/7/1989		CONVERTED TO COMPUTER FOLIO	FOLIO C REATE D CT NOT ISSUED
14/3/2001	7473016	CHANGE OF NAME	EDITION 1
27/3/2001	7408114	DEPARTMENTAL DEALING	
2/1/2002	8224025	CAVEAT	
3/4/2002	7978084	TRANSFER	
3/4/2002	7978085	MORTGAGE	EDITION 2
1/7/2004 1/7/2004	AA768806 AA768808		
1/7/2004	AA768809	MORTGAGE	EDITION 3
13/5/2014	AI575194	CAVEAT	
10/8/2015	AJ718137	WITHDRAWAL OF CAVEAT	
30/9/2015	AJ855800	CAVEAT	
27/9/2016	AK790761	CAVEAT	
17/5/2017	AM397637	DISCHARGE OF MORTGAGE	
17/5/2017		TRANSFER	EDITION 4
17/5/2017	AM397712	CAVEAT	
28/8/2017	AM681006	WITHDRAWAL OF CAVEAT	
28/8/2017	AM620363	MORTGAGE	EDITION 5

*** END OF SEARCH ***

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Licence: 981 Edition:* 000)8 	TRANSFER CLUDING COVENAN New South Wales Real Property Act 1900	7978084G
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9.50			adi i shiki încis-rite. I
METORRENS TIT	in appropriate, speerty the par		
9	Folio identifier	4/17671	
B) LODGED BY	Delivery Box Reference (option	or DX and Telephone RELIVER WIN DX 8006 PENE PH: 02 4755 35 onal):	ETTEL E
C) TRANSFEROF		D (ABN 97 000 075 034)	
D)	The transferor acknowledges rec	eipt of the consideration of \$310,	.000.00 and as regards the land specified above
- r	transfers to the transferce an es	57	and the repured the rand spectrum (1997)
E)		·	ferce as fully set out in schedule 1 hereto.
	Encumbrances (if applicable):		3.
G) TRANSFEREE	RICHARD RISTWEJ A	ND MAREK RISTWEJ both	of 64 Appletree Drive,
	RICHARD RISTWEJ A Cherrybrook NSW TENANCY: 1en 03/09/2001		
H) DATE)) <u>I contility that t</u>	RICHARD RISTWEJ A Cherrybrook NSW TENANCY: 05/09/2001 dd mm yyyy the transforor, with whom I am per y 1 am otherwise satisfied, signed t	ant m Comm	Certified correct for the purposes of the Real Property Act 1900 by the transferor.
H) DATE	RICHARD RISTWEJ A Cherrybrook NSW TENANCY: An OG / OG / 2001 dd num yyyy the transforor, with whom I am per y I am otherwise satisfied, signed to witness: See Annexure "B"	2162 ant m Comm conally acquainted or as to his transfer in my procence.	Certified correct for the purposes of the Rea
H) DATE)) <u>I contility that t</u>	RICHARD RISTWEJ A Cherrybrook NSW TENANCY: An 05/09/2001 dd mm yyyy the transforor, with whom I am per y I am otherwise satisfied, signed to witness: See Annexure "B"	2162 ant m Comm conally acquainted or as to his transfer in my procence.	Certified correct for the purposes of the Real Property Act 1900 by the transferor.
H) DATE I) <u>Leortify that t</u> whose identity Signature of y	RICHARD RISTWEJ A Cherrybrook NSW TENANCY: An OSTON /2001 dd nm yyyy the transforos, with whom I am per y I am otherwise satisfied, signed to witheses See Annexure "B" for execution by	2162 ant m Comm conally acquainted or as to his transfer in my procence.	Certified correct for the purposes of the Real Property Act 1900 by the transferor.
H) DATE 1) <u>Loortily that t</u> whose identity Signature of with Name of with Address of with Loortify that t	RICHARD RISTWEJ A Cherrybrook NSW TENANCY: An OSTON /2001 dd nm yyyy the transforos, with whom I am per y I am otherwise satisfied, signed to witheses See Annexure "B" for execution by	2162 <u>ent Comm</u> sonally acquainted or as to his transfer in my processor. Trans feror sonally acquainted or as to	Certified correct for the purposes of the Real Property Act 1900 by the transferor.
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H) DATE DATE DATE DATE DATE Signature of with Address of with Address of with Address of with Address of with Contify that the whose identity	RICHARD RISTWEJ A Cherrybrook NSW TENANCY: An OSTON /2001 dd nm yyyy the transforer, with whom I am per- y I am otherwise satisfied, signed t witness: See Annexure "B" for execution by itness: the transforer, with whom I am per- y I am otherwise satisfied, signed t witness: See Annexure "B" for execution by See Annexure "B"	2162 <u> <u> const</u> <u> n Comm</u> <u> conally acquainted or as to</u> <u> his transfer in my procence</u>. sonally acquainted or as to his transfer in my presence.</u>	Certified correct for the purposes of the Real Property Act 1900 by the transferor. Signature of transform Addael of transform Certified correct for the purposes of the Real Property Act 1900 by the transform.
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(J) SCHEDULE 1 TO TRANSFER: TRANSFEREE'S/TRANSFEROR'S COVENANT

(K) Dated:

From:

See Annexure "A" for Transferee's Covenant.

To:

(L) Land benefited by covenant: Land burdened by covenant:

(M) Terms of the covenant:

(N) Signature of witness:

Signature of witness:

Signature of transferor:

Achaelefealy Als

Signature of transferee:

Page 2 of __6

Req:R721465 /Doc:DL 7978084 /Rev:12-Apr-2002 /Sts:NO.OK /Pgs:ALL /Prt:06-Jun-2018 14:10 /Seq:3 of 6 Ref:rhodes /Src:M ~ 2

Annexure A - Transferee's Covenant



1 Servient Land

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Upon the registration of this Transfer, the Transferee will become the registered proprietor of Certificate of Title Folio Identifier 4/17671("Servient Land").

2 **Dominant Land**

Orica Australia Pty Limited (ABN 99 004 117 828) ("Orica") and the Transferor are the 2.1 registered proprietors of the following titles ("Dominant Land"):

Registered Proprietor	Lot/DP	Folio Identifier
Orica	Lot 1 DP964055	1/964055
Orica	Lot 6 DP736510	6/7365510
Transferor	Lot 6 section 2 DP3241	6/2/3241
Transferor	Lot 1 DP546471	1/546471
Transferor	Lot 3 Section 2 DP3241	3/2/3241
Transferor	Lot 4 Section 2 DP3241	4/2/3241
Transferor	Lot 5 Section 2 DP3241	5/2/3241
Transferor	Lot 87 DP5923	87/5923
Transferor	Lot 88 DP5923	88/5923
Transferor	Lot A DP343097	A/343097
Transferor	Lot B DP343097	B/343097
Transferor	Lot 1 DP651969	1/651969
Transferor	Lot 2 DP571148	2/571148
Transferor	Lot I DP440865	1/440865
Transferor	Lot 22 DP624240	22/624240

3 Definitions

3.1 For the removal of any doubt, the Transferor and the Transferee agree that for the purposes of this Restrictive Covenant, the following definitions will apply:

Development Application means:

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Page 3 of 6

Req:R721465 /Doc:DL 7978084 /Rev:12-Apr-2002 /Sts:NO.OK /Pgs:ALL /Prt:06-Jun-2018 14:10 /Seq:4 of 6 Ref:rhodes /Src:M



- (a) any proposed or actual applications to re-zone the Dominant Land which are made by Orica and/or the Transferor; and
- (b) any application to change the use of the Dominant Land; and
- (c) any development applications which Orica or the Transferor or both of them make in relation to the Dominant Land.

Joint Venture Party means McRoss Developments Pty Ltd (ABN 95 001 176 263) with whom Orica or the Transferor or both of them have entered into a joint venture for the purpose of developing, altering, improving and/or profiting from the Dominant Land.

Transferor means the Transferor as described on the front page.

Transferee means the Transferee as described on the front page.

4 Transferee's Covenant

v

- 4.1 The Transferee covenants with Orica and the Transferor not to:
 - (a) object to; or
 - (b) appeal in respect of; or
 - (c) cause or permit any objection or appeal to be made on its behalf in respect of; or
 - (d) take any action which may prejudice or affect or result in the imposition of conditions in respect of,

the Development Application.

- 4.2 The Transferee makes the covenant outlined in clause 4.1 with the intent that:
 - (a) the burden will run with and bind the Servient Land and every part thereof; and
 - (b) the benefit will be annexed to and devolve with each and every part of the Dominant Land.

5 Application of Transferee's Covenant

- 5.1 The covenant in clause 4.1, applies regardless of whether any objection or appeal is on the basis of planning, environmental, or any other grounds whatsoever and whether pursuant to planning, land use, environmental, local government or other legislation, rules, by-laws or regulations or otherwise.
- 5.2 Subject to clause 6, the Transferor or Orica are the only parties entitled to release the covenant contained in clause 4.1.

6 Expiration of Restrictive Covenant

The covenant in clause 4.1 expires on the later of:

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Page 4 of 6

Req:R721465 /Doc:DL 7978084 /Rev:12-Apr-2002 /Sts:NO.OK /Pgs:ALL /Prt:06-Jun-2018 14:10 /Seq:5 of 6 Ref:rhodes /Src:M

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- (a) 4 years after the Transferee becomes the registered proprietor of the Servient Land; and
- (b) On the date that Orica and/or the Transferor and/or their Joint Venture Party cease to be the registered proprietor of any part of the Dominant Land.

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Annexure B - Execution

Carl at

THE COMMON SEAL of SARKEM PTY LIMITED is duly affixed by authority of its directors in the presence of:

Signature of authorised person

Office held Director WILLIAM O. REYNOLDS × BARBARA GIBSON

Name of authorised person (block letters)

ommo Nex 1 Signature of authorised person

..... Office held Secretary

> NICHAELA HEALEY

Name of authorised person (block letters)

SIGNED, SEALED AND **DELIVERED** by **RICHARD RISTWEJ** in the presence of: Signature of withe Name of witness (block letter Signature of RICHARD RISTWED SIGNED, SEALED AND **DELIVERED** by MAREK **RISTWEJ** in the presence of: Signature of witness Irena 9 Name of witness (block letters) Signature of MAREK RISTWEJ 64 Apple tee Dr Cherrybeach. FILM WITH



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NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH _____

FOLIO: 4/17671

LAND

SERVICES

SEARCH DATE	TIME	EDITION NO	DATE
	and both land part		
6/6/2018	2:08 PM	5	28/8/2017

LAND

LOT 4 IN DEPOSITED PLAN 17671 LOCAL GOVERNMENT AREA CANADA BAY PARISH OF CONCORD COUNTY OF CUMBERLAND TITLE DIAGRAM DP17671

FIRST SCHEDULE

I-PROSPERITY WATERSIDE RHODES PTY LTD

(T AM397638)

SECOND SCHEDULE (4 NOTIFICATIONS)

- RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S) 1
- 2 C366747 COVENANT
- 7978084 COVENANT 3
- 4 AM620363 MORTGAGE TO LIYUN LIU

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

Rhodes

PRINTED ON 6/6/2018

* Any entries preceded by an asterisk do not appear on the current edition of the Certificate of Title. Warning: the information appearing under notations has not been formally recorded in the Register. Information appearing under notations has not been formally recorded in the Register. Information appearing under notations has not been formally recorded in the Register. Information appearing under notations has not been formally recorded in the Register. Information appearing under notations has not been formally recorded in the Register. Information appearing under notations has been provided electronically by the Register. Information appearing with Section 96B(2) of the Register Central In accordance with Section 96B(2) of the Register Central Interview.







NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE ------6/6/2018 2:09PM

FOLIO: 5/17671

First Title(s): SEE PRIOR TITLE(S) Prior Title(s): VOL 10461 FOL 79

Recorded	Number	Type of Instrument	C.T. Issue
21/8/1988		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
21/10/1988		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
21/4/1994	U202215	NOTICE OF DEATH	EDITION 1
22/8/1996	2401964	TRANSMISSION APPLICATION	EDITION 2
20/1/1998	3739708	TRANSFER	EDITION 3
27/3/2001	7408114	DEPARTMENTAL DEALING	
9/10/2014	AI946197	TRANSFER	EDITION 4
24/11/2014	AJ63769	TRANSFER WITHOUT MONETARY CONSIDERATION	EDITION 5
21/1/2015	AJ187818	DEPARTMENTAL DEALING	EDITION 6
15/8/2016	AK678568	CAVEAT	
1/12/2016	AK966644	TRANSFER	
1/12/2016		MORTGAGE	
1/12/2016	AK966646	MORTGAGE	EDITION 7
17/5/2017	лм397597	DISCHARGE OF MORTGAGE	
17/5/2017	AM397598	DISCHARGE OF MORTGAGE	EDITION 8
17/5/2017	AM397712	CAVEAT	
28/8/2017	AM681006	WITHDRAWAL OF CAVEAT	
28/8/2017		MORTGAGE	EDITION 9

*** END OF SEARCH ***

rhodes

PRINTED ON 6/6/2018

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Reg:R721468 /Doc:CT 10461-079 CT /Rev:31-Jan-2011 /Sts:OK.OK /Pgs:ALL /Prt:06-Jun-2018 14 Ref:rhodes /Src:M 104610 RTIFICATE OF TITLE OPERTY ACT, 1900, as amended. NEW SOUTH WALES Vol Appln. 5085 Prior Title Vol. 5333 Fol. 138 20-12-1966 DM. Edition issued \mathbf{r}_{2} K517598 2 I certify that the person described in the First Schedule is the registered proprietor of the undermentioned estate in the land within described subject nevertheless to such exceptions encumbrances and interesta as are shown in the Second Schedule. SEE AUTO FOLIO Witness SVandine **Registrar** General VARIANG PLAN SHOWING LOCATION OF LAND ĝ THIS DOCUMENT MUST NOT BE REMOVED FROM THE LAND TITLES Warquet ON HEREON 6 18 per St. West **OR ANY NOTIFICATI** Mary 40 feet to one inch 1517598 REP. CERTIFICATE ESTATE AND LAND REFERRED TO Estate in Fee Simple in Lot 5 in Deposited Plan 17671 at Rhodes in the Municipality of <u>Concord</u>, Parish of Concord and County of Cumberland, being part of Portion 173 granted to Frederick Meredith on 5 11-11-1794. PERSONS ARE CAUTIONED AGAINST ALTERING OR ADDING TO THIS FIRST SCHEDULE (continued overleaf). HARRY HALL of Concord West, Clerk and BERYL ELIZABETH VERBINA HALL his wife as Joint Tenants. aton Registrar General. SECOND SCHEDULE (continued overleaf). GAY Reservations and conditions, if any, contained in the Grown Grant above referred to Covenant created by Transfer No. C366747./ Jatas OFFICE Registrar General. NOTE: ENTRIES RULED THROUGH AND AUTHENTICATED BY THE SEAL OF THE REGISTRAR GENERAL ARE CANCELLED

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(A)	LAND Show no more than 20 References to Title.	5/17671		
(B)	REGISTERED DEALING			
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(D)	DECEASED REGISTERED PROPRIETOR		(NA HALL	
(E)	APPLICANT	TA JUNE MARY SCHE	SMBR I	S
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- 1944-	Name of Witness (BLOCK LETTERS) UCANCS TON Address of Witness EPPINCS SOLICI EVIDENCE SIGHTED & RETURNED (office use Piologie 111432/96 200 1616/96 + Stel Dec. Toc Commercial and Law Stationers	I TOR	Signature of Applicant CHECKED BY loffice use only	hi Al

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(H)	CONSENT OF EXECUTOR OR ADMINISTRATOR	
	L	transmission over 1
	of the Deceased Registered Proprietor, hereby consent to this application.	
	Signature of Witness	and a state of the
	Name of Witness (BLOCK LETTERS)	An owner an order of the
	Address of Witness Mitness	

INSTRUCTIONS FOR COMPLETION

STAMP DUTY: if the Applicant is a deviace, beneficiary, next-ol-kin or otherwise beneficially entitled or if the Deceased Registered Proprietor died prior to 31 December 1961 the application must be presented to the Office of State Revenue prior to lodgment at the Land Titles Office.

- 1. The Application must be completed clearly and legibly in permanent, dense, black or dark blue non-copying ink. If using a dot-matrix printer the prim must be letter-quality.
- 2. Do not use an eraser or correction fluid to make alterations: rule through rejected material. Initial each alteration in the lefthand margin.
- 3. If the space provided at any point is insufficient, you may annex additional pages. These must be the same size as the form; paper quality, colour. etc, must conform to the requirements set out in Land Titles Office Information Bulletin No. 19. All pages of any annexure must be signed by the person executing the Application and any attesting witness.

The following instructions relate to the marginal letters on the application.

(A) LAND

Show the relevant Reference to Title. If there are more than 20 show none in this panel. Place ALL of them on an ennexure (see 3 above) with 20 per sheet.

(B) REGISTERED DEALING

Show the registration number of any lease, mortgage or charge in regard to which the Applicant is applying to be registered as a proprietor.

(C) LODGED BY

This section relates to the person or firm lodging the Application at the Land Titles Office.

Reference (max. 15 characters) This is optional. Any slashes, dots, blank spaces, etc. will be counted as characters.

(D) DECEASED REGISTERED PROPRIETOR

Show the name in full. Address and occupation need not be shown.

(E) APPLICANT

Show the name in full. Address and occupation need not be shown.

(F) WEL/ESTATE, etc.

Amend "will/estate", "Probate/Letters of Administation" and "Land/Registered Dealing" as appropriate.

In the relevant spaces show the capacity (executor, devisee, etc) in which the Applicant is entitled to apply, the number and date of grant of the Probate or Letters of Administration pursuant to which the application is made, and the name of the person to whom the grant was made.

(G) EXECUTION

General The application must be executed by or on behalf of the Applicant.

By the Applicant Personally The application must be signed in the presence of an adult witness who is not an Applicant and who knows the party executing personally. The witness should complete the appropriate section of the application.

By the Applicant's Attorney The Power of Attorney must be registered in the General Register of Deeds at the Land Titles Office. The execution should take the form, "AB by her attorney XY [full name] pursuant to Power of Attorney Book 1234 Number 567".

Linder Authority If the application is made pursuant to any statutory, judicial or other authority, except a Power of Attorney (see above), the nature of the authority should be disclosed.

By a Corporation under Seel The execution should include a statement that the seal has been properly affixed, for example, "... pursuant to a resolution of the board of directors ...". Alternatively, all those attesting the affixing of the seal must state their position in the corporation.

(H) CONSENT OF EXECUTOR OR ADMINISTRATOR

This is required only where the Applicant claims to be entitled other than as executor, administrator or trustee.

The completed Application must be lodged by hand at the LAND TITLES OFFICE, Queen's Square, Sydney, together with the Certificate of Title, the probate or letters of administration (or a copy thereof certified by a solicitor to be a true copy) and a completed Notice of Sale.

If you have any questions about filling out the form, please call 228-6666 and ask for our Customer Services Branch.

Reg:R721470 /Doc:DL 3739708 /Rev:22-Jan-1998 /Sts:NO.OK /Pgs:ALL /Prt:06-Jun-2018 14:11 /Seq:1 of 1 Ref:rhodes /Src:M 3739708 E 97-01T Form: TRANSFEF V Licence: AUS/0634/96 New South Wales Real Property Act 1900 Instructions for filling out this form are available Office of State Revenue use only from the Land Titles Office of the state 10/00282102 30 S228 861091 9MATS .W.2.M (A) LAND TRANSFERRED If appropriate, specify the 5/17671 share or part transferred. (B) LODGED BY LTO Box Name, Address or DX and Telephone LEGATUS SERVICES PTY LIMITED 7541 DX 1048 **GPO BOX 1823** Reference (15 character maximum): 123 (C) TRANSFEROR JUNE MARY SCHEMBRI Dursuant to the Will of the late Beryl Elizabeth Hall and as regards the land specified above transfers to the transferee an estate in fee simple. (E) Encumbrances (if applicable): (F) TRANSFEREE **TS** (\$713 LGA) VIVIENNE MAY KUKLIN and JUNE MARY SCHEMBRI TW (Sheriff) (Ū) TENANCY: TENANTS IN COMMON IN EQUAL SHARES (H) We certify this dealing correct for the purposes of the Real Property Act 1900. DATE 16.1.95 Signed in my presence by the transferor who is personally known to me. Signature of Witness PAISLE Name of Witness (BLOCK LETTERS) 46 LANGSTON PLACE ddress of Signature of Transferor Signed in my presence by the transferee who is personally known to me. ********************* Signature of Witness SOLICITOR PORSignature of Transferee Name of Witness (BLOCK LETTERS) If signed on the transferee's behalf by a solicitor or licensed Address of Witness conveyancer, show the signatory's full name in block letters. Checked by (LTO use) Page 1 of

Req:R721474 /Doc:DL AI946197 /Rev:13-Oct-2014 /Sts:NO.OK /Pgs:ALL /Prt:06-Jun-2018 14:11 /Seq:1 of 2 Ref:rhodes /Src:M

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		Section 31B of the Real Property Act 1900 (RP Act) authorises the RI AT946197X	
	by this form for the Register is m	r the establishment and maintenance of the Real Property At ade available to any person for search upon payment of a fee, if any.	
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		Client No: 3323749 1755	
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		Ase dotato:	
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(B)	LODGED BY	Document Name, Address or DX, Telephone, and Customer Account Number if any	
		Collection Bernard Chiu Legal & Business Solutions	
		Box Level 18, Citigroup Centre 2 Park Street, Sydnay NSW 2000	
		Tel: (02) 9283 0628 Fax: (02) 9283 0230 Reference:	1
(C)	TRANSFEROR		_
(0)	TRANSFERON	VIVIENNE MAY KUKLIN AND JUNE MARY SCHEMBRI	
(D)	CONSIDERATION	The transferor acknowledges receipt of the consideration of S 2,950,000.00 and as rea	gard
(E)	ESTATE	the abovementioned land transfers to the transferee an estate in fee simple	
(F)	SHARE TRANSFERRED	÷	
(G)		Encumbrances (if applicable):	
(H)	TRANSFEREE	ANNE BI	
(1)	DATE	TENANCY:	_
(J)	I certify I am an e	eligible witness and that the transferor ig in my presence. () Certified correct for the purposes of the Real Property A 1900 by the transferor.	4ct
	Signature of with		,
	Name of stite and	FOR TRANSFEROR EXEcution	1
	Name of witness: Address of witnes		
		Certified correct for the purposes of the Real Property A 1900 on behalf of the transferee by the person whose signature appears below.	let
		Signature: Causau(*)	
		Signatory's name: Signatory's capacity: <u>Bernard Chiu</u> solicitor	
	The transfer	ee certifies that the eNOS data relevant to this dealing has been submitted and stored u	nde
	eNOS ID No.	Full name:Signature:	E
		uires that you must have known the signatory for more than 12 months or have sighted identifying documentat MUST BE IN BLOCK CAPITALS Page 1 01	130

Reg:R721474 /Doc:DL AI946197 /Rev:13-Oct-2014 /Sts:NO.OK /Pgs:ALL /Prt:06-Jun-2018 14:11 /Seq:2 of 2 Ref:rhodes /Src:M

Annexure A to TRANSFER

Parties: Vivienne May Kuklin and June Mary Schembri sale to Anne Bi

I certify I am an eligible witness and that the transferor's attorney signed this dealing in my presence. [See note* below]

Signature of witness:

Name of with Osan Joseph MITCHELMORE Address of witness: Solicitor 15 BELMORE STREET BURWOOD 2134

I certify I am an eligible witness and that the transferor signed this dealing in my presence. [See note* below]

Signature of witness: Name of witness: Address of witness: Certified correct for the purposes of the Real Property Act 1900 by the person(s) named below who signed this instrument pursuant to the power of attorney specified.

Signature of attorney:

Attorney's name: June Mary Schembri Signing on behalf of: Vivienne May Kuklin Power of attorney Book: 4675 No: 598

Certified correct for the purposes of the Real Property Act 1900 by the transferor.

Signature of transferor June Schambin

* s117 RP Act requires that you must have known the signatory for more than 12 months or have sighted identifying documentation. ALL HANDWRITING MUST BE IN BLOCK CAPITALS Page 2 of 2 Number additional pages sequentially Req:R728388 /Doc:DL AJ063769 /Rev:27-Nov-2014 /Sts:NO.OK /Pgs:ALL /Prt:07-Jun-2018 13:52 /Seq:1 of 1 Ref:rhodes /Src:M

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NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: 5/17671

LAND

SERVICES

SEARCH DATE	TIME	EDITION NO	DATE
6/6/2018	2:08 PM	9	28/8/2017

LAND

LOT 5 IN DEPOSITED PLAN 17671 AT RHODES LOCAL GOVERNMENT AREA CANADA BAY PARISH OF CONCORD COUNTY OF CUMBERLAND TITLE DIAGRAM DP17671

FIRST SCHEDULE

I-PROSPERITY WATERSIDE RHODES PTY LTD

(T AK966644)

SECOND SCHEDULE (3 NOTIFICATIONS)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)

- 2 C366747 COVENANT
- 3 AM620363 MORTGAGE TO LIYUN LIU

NOTATIONS

UNREGISTERED DEALINGS; NIL

*** END OF SEARCH ***

Rhodes

PRINTED ON 6/6/2018

* Any entries preceded by an exterisk do not appear on the current edition of the Certificate of Title. Warning: the information appearing under notations has not been formally recorded in the Register. InfoTrock an approved NSW Information Broker hereby certifica that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act 1900.

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Received: 06/06/2018 14:08:51







NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

Title

SEARCH DATE -----6/6/2018 2:09PM

FOLIO: 6/17671

First Title(s): SEE PRIOR TITLE(S) Prior Title(s): VOL 7877 FOL 193

Recorded	Number	Type of Instrument	C.T. Issue
27/11/1988	,	TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
9/6/1989		CONVERTED TO COMPUTER FOLIO	FOLIC CREATED CT NOT ISSUED
27/3/2001	7408114	DEPARTMENTAL DEALING	
13/5/2014	AI575195	CAVEAT	
10/8/2015	AJ718138	WITHDRAWAL OF CAVEAT	
30/9/2015	AJ855803	CAVEAT	
27/9/2016	AK790769	CAVEAT	
17/5/2017	AM397681	TRANSFER	EDITION 1
17/5/2017		CAVEAT	
28/8/2017	AM681006	WITHDRAWAL OF CAVEAT	
28/8/2017	AM620363	MORTGAGE	EDITION 2

*** END OF SEARCH ***

rhodes

PRINTED ON 6/6/2018

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NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH



LAND

SERVICES

SEARCH DATE	TIME	EDITIÓN NO	DATE
6/6/2018	2:08 PM	2	28/8/2017

LAND ----

LOT 6 IN DEPOSITED PLAN 17671 AT RHODES LOCAL GOVERNMENT AREA CANADA BAY PARISH OF CONCORD COUNTY OF CUMBERLAND TITLE DIAGRAM DP17671

FIRST SCHEDULE ------

I-PROSPERITY WATERSIDE RHODES PTY LTD

(T AM397681)

SECOND SCHEDULE (3 NOTIFICATIONS)

- 1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
- 2 C366747 COVENANT
- 3 AM620363 MORTGAGE TO LIYUN LIU

NOTATIONS

UNREGISTERED DEALINGS: R AN341612 TG AN371693.

*** END OF SEARCH ***

Rhodes

PRINTED ON 6/6/2018

⁴ Any entries preceded by an astensk do not appear on the current edition of the Certificate of Title, Warning: the information appearing under notations has not been formally recorded in the Register: InfoTrack an approved NSW Information Broker hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 968(2) of the Real Property Act 1900.

Appendix E

Section 10.7 Planning Certificates



APPLICANT: Mr Oitmaa 96 Hermitage Road WEST RYDE NSW 2114

PLANNING CERTIFICATE - under section 10.7 Environmental Planning and Assessment Act 1979

Property: 9 Marquet Street RHODES NSW 2138

Title: Lot 1 DP 17671

Certificate No:	PC2018/1227	Certificate Date:	13/06/2018
Receipt No:	Online Receipt	Certificate Fee:	
Land No:	21461	Applicant's Ref:	86432

SECTION 10.7(2)

In accordance with the requirements of section 10.7(2) of the Environmental Planning and Assessment Act (1979) ("the Act"), the following prescribed matters relate to the land at the date of this certificate.

ITEM 1 -Names of relevant planning instruments and DCPs

1. The following environmental planning instruments apply to the carrying out of development on the land:

Canada Bay Local Environmental Plan 2013

Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

State Environmental Planning Policy No. 19 – Bushland in Urban Areas State Environmental Planning Policy No. 21 - Caravan Parks State Environmental Planning Policy No. 30 - Intensive Agriculture State Environmental Planning Policy No. 33 - Hazardous and Offensive Development State Environmental Planning Policy No. 50 - Canal Estates State Environmental Planning Policy No. 55 - Remediation of Land State Environmental Planning Policy No. 64 – Advertising and Signage State Environmental Planning Policy No. 65 - Design Quality of Residential Flat Development State Environmental Planning Policy No. 70 – Affordable Housing (Revised Schemes) State Environmental Planning Policy - SEPP (Housing for Seniors or People with a Disability) 2004 State Environmental Planning Policy – Building Sustainability Index: BASIX 2004 State Environmental Planning Policy - (Major Development) 2005 State Environmental Planning Policy - (Mining, Petroleum Production and Extractive Industries) 2007 State Environmental Planning Policy (Infrastructure) 2007 State Environment Planning Policy (Temporary Structures) 2007 State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 State Environmental Planning Policy (Repeal of Concurrence and Referral Provisions) 2008 State Environmental Planning Policy (Affordable Rental Housing) 2009 State Environmental Planning Policy (Urban Renewal) 2010 State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017 State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017

State Environmental Planning Policy (Coastal Management) 2018 (wholly within)

2. The following proposed environmental planning instruments apply to the carrying out of development on the land and are or have been the subject of community consultation or on public exhibition under the Environmental Planning and Assessment Act 1979:

Planning Proposal - Housekeeping amendments

3. The following development control plans apply to the carrying out of development on the land:

Rhodes West Development Control Plan

Sydney Harbour Foreshores & Waterways Area Development Control Plan

ITEM 2 - Zoning and land use under relevant LEPs

1. (a) Zoning details in the instruments identified in item 1(1) above

Zone B4 Mixed Use

1 Objectives of zone

- To provide a mixture of compatible land uses.
- To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.

2 Permitted without consent

Environmental protection works

3 Permitted with consent

Boarding houses; Building identification signs; Business identification signs; Child care centres; Commercial premises; Community facilities; Educational establishments; Entertainment facilities; Function centres; Hotel or motel accommodation; Information and education facilities; Light industries; Medical centres; Passenger transport facilities; Recreation facilities (indoor); Registered clubs; Residential flat buildings; Respite day care centres; Restricted premises; Roads; Seniors housing; Shop top housing; Any other development not specified in item 2 or 4

4 Prohibited

Agriculture; Air transport facilities; Airstrips; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Correctional centres; Crematoria; Depots; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Farm stay accommodation; Forestry; Freight transport facilities; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial training facilities; Industries; Jetties; Moorings; Open cut mining; Recreation facilities (major); Recreation facilities (outdoor); Residential accommodation; Resource recovery facilities; Rural industries; Sewage treatment plants; Signage; Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Warehouse or distribution centres; Waste disposal facilities; Water recreation structures; Water supply systems

Additional permitted uses

No additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to this land

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under an EPI

(d) Is the land within a heritage conservation area?

The land is not within a heritage conservation area

(e) Is there a heritage item situated on the land?

There are no heritage items situated on the land

2. (a) Zoning details in the instruments identified in item 1(2) above

Zone B4 Mixed Use

1 Objectives of zone

- To provide a mixture of compatible land uses.
- To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.

2 Permitted without consent

Environmental Protection Works;

3 Permitted with consent

Boarding houses; Building identification signs; Business identification signs; Centrebased child care facilities; Commercial premises; Community facilities; Educational establishments; Entertainment facilities; Function centres; Hotel or motel accommodation; Information and education facilities; Light industries; Medical centres; Passenger transport facilities; Recreation facilities (indoor); Registered clubs; Respite day care centres; Restricted premises; Roads; Seniors housing; Shop top housing; Any other development not specified in item 2 or 4.

4 Prohibited

Agriculture; Air transport facilities; Airstrips; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Correctional centres; Crematoria; Depots; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Farm stay accommodation; Forestry; Freight transport facilities; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial training facilities; Industries; Jetties; Moorings; Open cut mining; Recreation facilities (major); Recreation facilities (outdoor); Residential accommodation; Resource recovery facilities; Rural industries; Sewage treatment

plants; Signage; Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Warehouse or distribution centres; Waste disposal facilities; Water recreation structures; Water supply systems.

Additional permitted uses

No draft additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to the land under a draft environmental planning instrument

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under a draft EPI

(d) Is the land within a draft heritage conservation area?

The land is not within a draft heritage conservation area

(e) Is there a draft heritage item situated on the land?

There are no draft heritage items situated on the land

ITEM 2A - Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006

Is the land identified within any zone under Part 3 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006, a Precinct Plan, or a Proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act?

No

ITEM 3 – Complying Development Exclusions

Is the land, land on which complying development may be carried out under clauses 1.17A(1)(c) to (e),(2),(3) and (4), 1.18 (1)(c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008?

Housing Code

Yes, under the Housing Code complying development may be carried out on the land.

Rural Housing Code

Yes, under the Rural Housing Code complying development may be carried out on the land.
Housing Alterations Code

Yes, under the Housing Alterations Code complying development may be carried out on the land.

General Development Code

Yes, under the General Development Code complying development may be carried out on the land.

Commercial and Industrial Alterations Code

Yes, under the General Commercial and Industrial Code complying development may be carried out on the land.

Commercial and Industrial (New Buildings and Additions) Code

Yes, under the General Commercial and Industrial (New Buildings and Additions) Code complying development may be carried out on the land.

Container Recycling Facilities Code

Yes, under the Container Recycling Facilities Code complying development may be carried out on the land.

Subdivisions Code

Yes, under the Subdivisions Code complying development may be carried out on the land.

Demolition Code

Yes, under the Demolition Code complying development may be carried out on the land.

Fire Safety Code

Yes, under the Fire Safety Code complying development may be carried out on the land.

ITEM 4 – Coastal protection

To the extent that the Council has been so notified by the Department of Finance, Services and Innovation is the land affected by the operation of section 38 or 39 of the Coastal Protection Act 1979?

No

ITEM 4A – Certain information relating to beaches and coasts

1. Has an order been made under Part 4D of the Coastal Protection Act 1979 in relation to temporary coastal protection works (within the meaning of that Act) on the land (or on public land adjacent to that land), except where Council is satisfied that such an order has been fully complied with?

No

2. (a) Has the Council been notified under section 55X of the Coastal Protection Act 1979 that temporary coastal protection works (within the meaning of that Act) have been placed on the land (or on public land adjacent to that land)?

No

(b) If the works have been so placed, is Council satisfied that the works have been removed and the land restored in accordance with that Act.

N/A

ITEM 4B – Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

Has the owner (or any previous owner) of the land consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)?

No

ITEM 5 – Mine subsidence

Is the land proclaimed to be in a mine subsidence district within the meaning of section 15 of the Mine Subsidence Compensation Act 1961?

No

ITEM 6 – Road widening and road realignment

Is the land affected by any road widening or road realignment under:

(a) Division 2 of Part 3 of the Roads Act 1993; or

(b) Any environmental planning instrument; or (c) Any resolution of the Council?

No

ITEM 7 – Council and other public authority policies on hazard risk restrictions

- (a) Whether or not the land is affected by a policy adopted by the Council that restricts the development of the land because of the likelihood of:-
 - (i) land slip No
 - (ii) bushfire No
 - (iii) tidal inundation No
 - (iv) subsidence No
 - (v) acid sulphate soils Yes

The land is identified as being within Class 5 on the Acid Sulfate Soil Map under the Canada Bay LEP 2013. Works prohibited without Council approval (except as provided by subclause 4 of clause 6.1 of the Canada Bay LEP 2013) include:

• Works within 500 metres of adjacent Class 1, 2, 3 or 4 land that is below 5 metres Australian Height Datum by which the watertable is likely to be lowered below 1 metre Australian Height Datum on adjacent Class 1, 2, 3 or 4 land.

(vi) land contamination Yes

Council has adopted by resolution a policy on contaminated land that applies to all land within the City of Canada Bay. Please note that this statement refers to whether or not Council has a policy regarding contamination and is not a statement on whether the property is affected by contamination or potential contamination.

(b) Whether or not the land is affected by a policy adopted by any other public authority and notified to the Council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No

ITEM 7A – Flood related development controls information

1. Whether or not development on the land or part of the land for the purposes of dwelling houses, dual occupancies, multi dwelling housing or residential flat buildings (not including development for the purposes of group homes or seniors housing) is subject to flood related development controls.

No

2. Whether or not development on the land or part of the land for any other purpose is subject to flood related development controls.

No

ITEM 8 – Land reserved for acquisition

Is there an environmental planning instrument, or proposed environmental planning instrument referred to in clause 1 which makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Environmental Planning and Assessment Act 1979?

No

ITEM 9 – Contributions plans

The name of each contributions plan applying to the land is:-

City of Canada Bay S7.12 Fixed Levy Contributions Plan

Renewing Rhodes Contributions Framework

ITEM 9A - Biodiversity certified land

Is the land biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016 (including land certified under Part 7AA of the Threatened Species Conservation Act 1995)?

No

ITEM 10 – Biodiversity stewardship sites

Has Council been notified by the Chief Executive of the Office of Environment and Heritage that the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the Biodiversity Conservation Act 2016 (including biobanking agreements under Part 7A of the Threatened Species Conservation Act 1995)?

No

ITEM 10A – Native vegetation clearing set asides

Under section 60ZC of the Local Land Service Act 2013, has Council been notified by Local Land Services (or is it registered in the public register under that section) that the land contains a set aside area?

No

ITEM 11 – Bush fire prone land

(a)	All of the land is bush fire prone land.	No
(b)	Some of the land is bush fire prone land.	No
(c)	None of the land is bush fire prone land.	Yes

ITEM 12 – Property vegetation plans

Has Council been notified (by the person or body that approved the plan) of the existence of a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force) applying to the land?

No

ITEM 13 – Orders under Trees (Disputes Between Neighbours) Act 2006

Has Council been notified that an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land?

No

ITEM 14 – Directions under Part 3A

Is there a direction by the Minister in force under section 75P (2) (c1) of the Environmental Planning and Assessment Act 1979 that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect?

No

ITEM 15 – Site compatibility certificates and conditions for seniors housing

(a) Has a current site compatibility certificate (seniors housing), of which the Council is aware, been issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land?

No

(b) Have any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land? No

ITEM 16 – Site compatibility certificates for infrastructure, schools or TAFE establishments

Has a valid site compatibility certificate (infrastructure) or a site compatibility certificate (schools or TAFE establishments), of which the Council is aware, been issued?

No

ITEM 17 – Site compatibility certificates and conditions for affordable rental housing

1. Has a current site compatibility certificate (affordable rental housing), of which the Council is aware, been issued in respect of proposed development on the land?

No

2. Have any terms of a kind referred to in clause 17(1) or 38(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 been imposed as a condition of consent to a development application in respect of the land?

No

ITEM 18 – Paper subdivision information

Has a development plan been adopted that applies to the land or that is proposed to be subject to a consent ballot?

No

ITEM 19 – Site verification certificates

Has Council been made aware of a current site verification certificate that has been issued in respect of the land?

No

ITEM 20 – Loose – fill asbestos insulation

Has Council been notified that the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division?

No. Contact NSW Fair Trading for more information.

ITEM 21 – Affected building notices and building product rectification orders

1. Is any affected building notice in force in respect of the land?

No

2. Is any building product rectification order in force in respect of the land that has not been fully complied with?

No

3. Has a notice of intention to make a building product rectification order been given in respect of that land that is outstanding?

No

ITEM 22 – Matters arising under the Contaminated Land Management Act 1997

Section 59(2) of the Contaminated Land Management Act 1997 prescribes the following additional matters to be specified in planning certificates:-

(a) At the date of this certificate, is the land (or part of the land) to which this certificate relates significantly contaminated land?

No

(b) At the date of this certificate, is the land to which this certificate relates subject to a management order?

No

(c) At the date of this certificate, is the land to which this certificate relates the subject of an approved voluntary management proposal?

No

(d) At the date of this certificate, is the land to which this certificate relates subject to an ongoing maintenance order?

No

(e) At the date of this certificate, is the land to which this certificate relates the subject of a site audit statement and a copy of such a statement has been provided to the Council?

No

GENERAL INFORMATION

The absence of any reference to a matter affecting the land shall not imply that the land is not affected by that matter not referred to in this certificate.

Information provided under section 10.7(2) is in accordance with the matters prescribed under schedule 4 of the Environmental Planning and Assessment Regulation 2000 and is provided only

to the extent that the Council has been notified by the Department of Public Works or Department of Planning.

When advice in accordance with section 10.7(5) is requested the Council is under no obligation to furnish any advice. If advice is provided Council draws your attention to section 10.7(6) and schedule 6 of the *Environmental Planning and Assessment Act 1979* which have the effect that Council shall not incur any liability in respect of advice provided in good faith pursuant to section 10.7(5), including the furnishing of advice in respect of contaminated land.

Any enquiries regarding State and Regional Environmental Planning Policies should be directed to the Department of Planning at http://www.planning.nsw.gov.au

Please contact Council's Strategic Planning section for further information about this Planning Certificate.

Peter Gainsford General Manager



APPLICANT: Mr Oitmaa 96 Hermitage Road WEST RYDE NSW 2114

PLANNING CERTIFICATE - under section 10.7 Environmental Planning and Assessment Act 1979

Property: 7 Marquet Street RHODES NSW 2138

Title: Lot 2 DP 17671

Certificate No:	PC2018/1228	Certificate Date:	13/06/2018
Receipt No:	Online Receipt	Certificate Fee:	
Land No:	21462	Applicant's Ref:	86432

SECTION 10.7(2)

In accordance with the requirements of section 10.7(2) of the Environmental Planning and Assessment Act (1979) ("the Act"), the following prescribed matters relate to the land at the date of this certificate.

ITEM 1 -Names of relevant planning instruments and DCPs

1. The following environmental planning instruments apply to the carrying out of development on the land:

Canada Bay Local Environmental Plan 2013

Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

State Environmental Planning Policy No. 19 – Bushland in Urban Areas State Environmental Planning Policy No. 21 - Caravan Parks State Environmental Planning Policy No. 30 - Intensive Agriculture State Environmental Planning Policy No. 33 - Hazardous and Offensive Development State Environmental Planning Policy No. 50 - Canal Estates State Environmental Planning Policy No. 55 - Remediation of Land State Environmental Planning Policy No. 64 – Advertising and Signage State Environmental Planning Policy No. 65 - Design Quality of Residential Flat Development State Environmental Planning Policy No. 70 – Affordable Housing (Revised Schemes) State Environmental Planning Policy - SEPP (Housing for Seniors or People with a Disability) 2004 State Environmental Planning Policy – Building Sustainability Index: BASIX 2004 State Environmental Planning Policy - (Major Development) 2005 State Environmental Planning Policy - (Mining, Petroleum Production and Extractive Industries) 2007 State Environmental Planning Policy (Infrastructure) 2007 State Environment Planning Policy (Temporary Structures) 2007 State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 State Environmental Planning Policy (Repeal of Concurrence and Referral Provisions) 2008 State Environmental Planning Policy (Affordable Rental Housing) 2009 State Environmental Planning Policy (Urban Renewal) 2010 State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017 State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017

State Environmental Planning Policy (Coastal Management) 2018 (wholly within)

2. The following proposed environmental planning instruments apply to the carrying out of development on the land and are or have been the subject of community consultation or on public exhibition under the Environmental Planning and Assessment Act 1979:

Planning Proposal - Housekeeping amendments

3. The following development control plans apply to the carrying out of development on the land:

Rhodes West Development Control Plan

Sydney Harbour Foreshores & Waterways Area Development Control Plan

ITEM 2 - Zoning and land use under relevant LEPs

1. (a) Zoning details in the instruments identified in item 1(1) above

Zone B4 Mixed Use

1 Objectives of zone

- To provide a mixture of compatible land uses.
- To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.

2 Permitted without consent

Environmental protection works

3 Permitted with consent

Boarding houses; Building identification signs; Business identification signs; Child care centres; Commercial premises; Community facilities; Educational establishments; Entertainment facilities; Function centres; Hotel or motel accommodation; Information and education facilities; Light industries; Medical centres; Passenger transport facilities; Recreation facilities (indoor); Registered clubs; Residential flat buildings; Respite day care centres; Restricted premises; Roads; Seniors housing; Shop top housing; Any other development not specified in item 2 or 4

4 Prohibited

Agriculture; Air transport facilities; Airstrips; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Correctional centres; Crematoria; Depots; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Farm stay accommodation; Forestry; Freight transport facilities; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial training facilities; Industries; Jetties; Moorings; Open cut mining; Recreation facilities (major); Recreation facilities (outdoor); Residential accommodation; Resource recovery facilities; Rural industries; Sewage treatment plants; Signage; Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Warehouse or distribution centres; Waste disposal facilities; Water recreation structures; Water supply systems

Additional permitted uses

No additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to this land

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under an EPI

(d) Is the land within a heritage conservation area?

The land is not within a heritage conservation area

(e) Is there a heritage item situated on the land?

There are no heritage items situated on the land

2. (a) Zoning details in the instruments identified in item 1(2) above

Zone B4 Mixed Use

1 Objectives of zone

- To provide a mixture of compatible land uses.
- To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.

2 Permitted without consent

Environmental Protection Works;

3 Permitted with consent

Boarding houses; Building identification signs; Business identification signs; Centrebased child care facilities; Commercial premises; Community facilities; Educational establishments; Entertainment facilities; Function centres; Hotel or motel accommodation; Information and education facilities; Light industries; Medical centres; Passenger transport facilities; Recreation facilities (indoor); Registered clubs; Respite day care centres; Restricted premises; Roads; Seniors housing; Shop top housing; Any other development not specified in item 2 or 4.

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Agriculture; Air transport facilities; Airstrips; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Correctional centres; Crematoria; Depots; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Farm stay accommodation; Forestry; Freight transport facilities; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial training facilities; Industries; Jetties; Moorings; Open cut mining; Recreation facilities (major); Recreation facilities (outdoor); Residential accommodation; Resource recovery facilities; Rural industries; Sewage treatment

plants; Signage; Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Warehouse or distribution centres; Waste disposal facilities; Water recreation structures; Water supply systems.

Additional permitted uses

No draft additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to the land under a draft environmental planning instrument

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under a draft EPI

(d) Is the land within a draft heritage conservation area?

The land is not within a draft heritage conservation area

(e) Is there a draft heritage item situated on the land?

There are no draft heritage items situated on the land

ITEM 2A - Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006

Is the land identified within any zone under Part 3 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006, a Precinct Plan, or a Proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act?

No

ITEM 3 – Complying Development Exclusions

Is the land, land on which complying development may be carried out under clauses 1.17A(1)(c) to (e),(2),(3) and (4), 1.18 (1)(c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008?

Housing Code

Yes, under the Housing Code complying development may be carried out on the land.

Rural Housing Code

Yes, under the Rural Housing Code complying development may be carried out on the land.

Housing Alterations Code

Yes, under the Housing Alterations Code complying development may be carried out on the land.

General Development Code

Yes, under the General Development Code complying development may be carried out on the land.

Commercial and Industrial Alterations Code

Yes, under the General Commercial and Industrial Code complying development may be carried out on the land.

Commercial and Industrial (New Buildings and Additions) Code

Yes, under the General Commercial and Industrial (New Buildings and Additions) Code complying development may be carried out on the land.

Container Recycling Facilities Code

Yes, under the Container Recycling Facilities Code complying development may be carried out on the land.

Subdivisions Code

Yes, under the Subdivisions Code complying development may be carried out on the land.

Demolition Code

Yes, under the Demolition Code complying development may be carried out on the land.

Fire Safety Code

Yes, under the Fire Safety Code complying development may be carried out on the land.

ITEM 4 – Coastal protection

To the extent that the Council has been so notified by the Department of Finance, Services and Innovation is the land affected by the operation of section 38 or 39 of the Coastal Protection Act 1979?

No

ITEM 4A – Certain information relating to beaches and coasts

1. Has an order been made under Part 4D of the Coastal Protection Act 1979 in relation to temporary coastal protection works (within the meaning of that Act) on the land (or on public land adjacent to that land), except where Council is satisfied that such an order has been fully complied with?

No

2. (a) Has the Council been notified under section 55X of the Coastal Protection Act 1979 that temporary coastal protection works (within the meaning of that Act) have been placed on the land (or on public land adjacent to that land)?

No

(b) If the works have been so placed, is Council satisfied that the works have been removed and the land restored in accordance with that Act.

N/A

ITEM 4B – Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

Has the owner (or any previous owner) of the land consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)?

No

ITEM 5 – Mine subsidence

Is the land proclaimed to be in a mine subsidence district within the meaning of section 15 of the Mine Subsidence Compensation Act 1961?

No

ITEM 6 – Road widening and road realignment

Is the land affected by any road widening or road realignment under:

(a) Division 2 of Part 3 of the Roads Act 1993; or

(b) Any environmental planning instrument; or (c) Any resolution of the Council?

No

ITEM 7 – Council and other public authority policies on hazard risk restrictions

- (a) Whether or not the land is affected by a policy adopted by the Council that restricts the development of the land because of the likelihood of:-
 - (i) land slip No
 - (ii)bushfireNo(iii)tidal inundationNo

 - (iv)subsidenceNo(v)acid sulphate soilsYes
 - (v) acid sulphate soils Yes

The land is identified as being within Class 5 on the Acid Sulfate Soil Map under the Canada Bay LEP 2013. Works prohibited without Council approval (except as provided by subclause 4 of clause 6.1 of the Canada Bay LEP 2013) include:

• Works within 500 metres of adjacent Class 1, 2, 3 or 4 land that is below 5 metres Australian Height Datum by which the watertable is likely to be lowered below 1 metre Australian Height Datum on adjacent Class 1, 2, 3 or 4 land.

(vi) land contamination Yes

Council has adopted by resolution a policy on contaminated land that applies to all land within the City of Canada Bay. Please note that this statement refers to whether or not Council has a policy regarding contamination and is not a statement on whether the property is affected by contamination or potential contamination.

(b) Whether or not the land is affected by a policy adopted by any other public authority and notified to the Council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No

ITEM 7A – Flood related development controls information

1. Whether or not development on the land or part of the land for the purposes of dwelling houses, dual occupancies, multi dwelling housing or residential flat buildings (not including development for the purposes of group homes or seniors housing) is subject to flood related development controls.

No

2. Whether or not development on the land or part of the land for any other purpose is subject to flood related development controls.

No

ITEM 8 – Land reserved for acquisition

Is there an environmental planning instrument, or proposed environmental planning instrument referred to in clause 1 which makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Environmental Planning and Assessment Act 1979?

No

ITEM 9 – Contributions plans

The name of each contributions plan applying to the land is:-

City of Canada Bay S7.12 Fixed Levy Contributions Plan

Renewing Rhodes Contributions Framework

ITEM 9A - Biodiversity certified land

Is the land biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016 (including land certified under Part 7AA of the Threatened Species Conservation Act 1995)?

No

ITEM 10 – Biodiversity stewardship sites

Has Council been notified by the Chief Executive of the Office of Environment and Heritage that the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the Biodiversity Conservation Act 2016 (including biobanking agreements under Part 7A of the Threatened Species Conservation Act 1995)?

No

ITEM 10A – Native vegetation clearing set asides

Under section 60ZC of the Local Land Service Act 2013, has Council been notified by Local Land Services (or is it registered in the public register under that section) that the land contains a set aside area?

No

ITEM 11 – Bush fire prone land

(a)	All of the land is bush fire prone land.	No
(b)	Some of the land is bush fire prone land.	No
(c)	None of the land is bush fire prone land.	Yes

ITEM 12 – Property vegetation plans

Has Council been notified (by the person or body that approved the plan) of the existence of a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force) applying to the land?

No

ITEM 13 – Orders under Trees (Disputes Between Neighbours) Act 2006

Has Council been notified that an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land?

No

ITEM 14 – Directions under Part 3A

Is there a direction by the Minister in force under section 75P (2) (c1) of the Environmental Planning and Assessment Act 1979 that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect?

No

ITEM 15 – Site compatibility certificates and conditions for seniors housing

(a) Has a current site compatibility certificate (seniors housing), of which the Council is aware, been issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land?

No

(b) Have any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land? No

ITEM 16 – Site compatibility certificates for infrastructure, schools or TAFE establishments

Has a valid site compatibility certificate (infrastructure) or a site compatibility certificate (schools or TAFE establishments), of which the Council is aware, been issued?

No

ITEM 17 – Site compatibility certificates and conditions for affordable rental housing

1. Has a current site compatibility certificate (affordable rental housing), of which the Council is aware, been issued in respect of proposed development on the land?

No

2. Have any terms of a kind referred to in clause 17(1) or 38(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 been imposed as a condition of consent to a development application in respect of the land?

No

ITEM 18 – Paper subdivision information

Has a development plan been adopted that applies to the land or that is proposed to be subject to a consent ballot?

No

ITEM 19 – Site verification certificates

Has Council been made aware of a current site verification certificate that has been issued in respect of the land?

No

ITEM 20 – Loose – fill asbestos insulation

Has Council been notified that the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division?

No. Contact NSW Fair Trading for more information.

ITEM 21 – Affected building notices and building product rectification orders

1. Is any affected building notice in force in respect of the land?

No

2. Is any building product rectification order in force in respect of the land that has not been fully complied with?

No

3. Has a notice of intention to make a building product rectification order been given in respect of that land that is outstanding?

No

ITEM 22 – Matters arising under the Contaminated Land Management Act 1997

Section 59(2) of the Contaminated Land Management Act 1997 prescribes the following additional matters to be specified in planning certificates:-

(a) At the date of this certificate, is the land (or part of the land) to which this certificate relates significantly contaminated land?

No

(b) At the date of this certificate, is the land to which this certificate relates subject to a management order?

No

(c) At the date of this certificate, is the land to which this certificate relates the subject of an approved voluntary management proposal?

No

(d) At the date of this certificate, is the land to which this certificate relates subject to an ongoing maintenance order?

No

(e) At the date of this certificate, is the land to which this certificate relates the subject of a site audit statement and a copy of such a statement has been provided to the Council?

No

GENERAL INFORMATION

The absence of any reference to a matter affecting the land shall not imply that the land is not affected by that matter not referred to in this certificate.

Information provided under section 10.7(2) is in accordance with the matters prescribed under schedule 4 of the Environmental Planning and Assessment Regulation 2000 and is provided only

to the extent that the Council has been notified by the Department of Public Works or Department of Planning.

When advice in accordance with section 10.7(5) is requested the Council is under no obligation to furnish any advice. If advice is provided Council draws your attention to section 10.7(6) and schedule 6 of the *Environmental Planning and Assessment Act 1979* which have the effect that Council shall not incur any liability in respect of advice provided in good faith pursuant to section 10.7(5), including the furnishing of advice in respect of contaminated land.

Any enquiries regarding State and Regional Environmental Planning Policies should be directed to the Department of Planning at http://www.planning.nsw.gov.au

Please contact Council's Strategic Planning section for further information about this Planning Certificate.

Peter Gainsford General Manager



APPLICANT: Mr Oitmaa 96 Hermitage Road WEST RYDE NSW 2114

PLANNING CERTIFICATE - under section 10.7 Environmental Planning and Assessment Act 1979

Property: 5 Marquet Street RHODES NSW 2138

Title: Lot 3 DP 17671

Certificate No:	PC2018/1229	Certificate Date:	13/06/2018
Receipt No:	Online Receipt	Certificate Fee:	
Land No:	21463	Applicant's Ref:	86432

SECTION 10.7(2)

In accordance with the requirements of section 10.7(2) of the Environmental Planning and Assessment Act (1979) ("the Act"), the following prescribed matters relate to the land at the date of this certificate.

ITEM 1 -Names of relevant planning instruments and DCPs

1. The following environmental planning instruments apply to the carrying out of development on the land:

Canada Bay Local Environmental Plan 2013

Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

State Environmental Planning Policy No. 19 – Bushland in Urban Areas State Environmental Planning Policy No. 21 - Caravan Parks State Environmental Planning Policy No. 30 - Intensive Agriculture State Environmental Planning Policy No. 33 - Hazardous and Offensive Development State Environmental Planning Policy No. 50 - Canal Estates State Environmental Planning Policy No. 55 - Remediation of Land State Environmental Planning Policy No. 64 – Advertising and Signage State Environmental Planning Policy No. 65 - Design Quality of Residential Flat Development State Environmental Planning Policy No. 70 – Affordable Housing (Revised Schemes) State Environmental Planning Policy - SEPP (Housing for Seniors or People with a Disability) 2004 State Environmental Planning Policy – Building Sustainability Index: BASIX 2004 State Environmental Planning Policy - (Major Development) 2005 State Environmental Planning Policy - (Mining, Petroleum Production and Extractive Industries) 2007 State Environmental Planning Policy (Infrastructure) 2007 State Environment Planning Policy (Temporary Structures) 2007 State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 State Environmental Planning Policy (Repeal of Concurrence and Referral Provisions) 2008 State Environmental Planning Policy (Affordable Rental Housing) 2009 State Environmental Planning Policy (Urban Renewal) 2010 State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017 State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017

State Environmental Planning Policy (Coastal Management) 2018 (wholly within)

2. The following proposed environmental planning instruments apply to the carrying out of development on the land and are or have been the subject of community consultation or on public exhibition under the Environmental Planning and Assessment Act 1979:

Planning Proposal - Housekeeping amendments

3. The following development control plans apply to the carrying out of development on the land:

Rhodes West Development Control Plan

Sydney Harbour Foreshores & Waterways Area Development Control Plan

ITEM 2 - Zoning and land use under relevant LEPs

1. (a) Zoning details in the instruments identified in item 1(1) above

Zone B4 Mixed Use

1 Objectives of zone

- To provide a mixture of compatible land uses.
- To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.

2 Permitted without consent

Environmental protection works

3 Permitted with consent

Boarding houses; Building identification signs; Business identification signs; Child care centres; Commercial premises; Community facilities; Educational establishments; Entertainment facilities; Function centres; Hotel or motel accommodation; Information and education facilities; Light industries; Medical centres; Passenger transport facilities; Recreation facilities (indoor); Registered clubs; Residential flat buildings; Respite day care centres; Restricted premises; Roads; Seniors housing; Shop top housing; Any other development not specified in item 2 or 4

4 Prohibited

Agriculture; Air transport facilities; Airstrips; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Correctional centres; Crematoria; Depots; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Farm stay accommodation; Forestry; Freight transport facilities; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial training facilities; Industries; Jetties; Moorings; Open cut mining; Recreation facilities (major); Recreation facilities (outdoor); Residential accommodation; Resource recovery facilities; Rural industries; Sewage treatment plants; Signage; Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Warehouse or distribution centres; Waste disposal facilities; Water recreation structures; Water supply systems

Additional permitted uses

No additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to this land

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under an EPI

(d) Is the land within a heritage conservation area?

The land is not within a heritage conservation area

(e) Is there a heritage item situated on the land?

There are no heritage items situated on the land

2. (a) Zoning details in the instruments identified in item 1(2) above

Zone B4 Mixed Use

1 Objectives of zone

- To provide a mixture of compatible land uses.
- To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.

2 Permitted without consent

Environmental Protection Works;

3 Permitted with consent

Boarding houses; Building identification signs; Business identification signs; Centrebased child care facilities; Commercial premises; Community facilities; Educational establishments; Entertainment facilities; Function centres; Hotel or motel accommodation; Information and education facilities; Light industries; Medical centres; Passenger transport facilities; Recreation facilities (indoor); Registered clubs; Respite day care centres; Restricted premises; Roads; Seniors housing; Shop top housing; Any other development not specified in item 2 or 4.

4 Prohibited

Agriculture; Air transport facilities; Airstrips; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Correctional centres; Crematoria; Depots; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Farm stay accommodation; Forestry; Freight transport facilities; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial training facilities; Industries; Jetties; Moorings; Open cut mining; Recreation facilities (major); Recreation facilities (outdoor); Residential accommodation; Resource recovery facilities; Rural industries; Sewage treatment

plants; Signage; Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Warehouse or distribution centres; Waste disposal facilities; Water recreation structures; Water supply systems.

Additional permitted uses

No draft additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to the land under a draft environmental planning instrument

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under a draft EPI

(d) Is the land within a draft heritage conservation area?

The land is not within a draft heritage conservation area

(e) Is there a draft heritage item situated on the land?

There are no draft heritage items situated on the land

ITEM 2A - Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006

Is the land identified within any zone under Part 3 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006, a Precinct Plan, or a Proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act?

No

ITEM 3 – Complying Development Exclusions

Is the land, land on which complying development may be carried out under clauses 1.17A(1)(c) to (e),(2),(3) and (4), 1.18 (1)(c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008?

Housing Code

Yes, under the Housing Code complying development may be carried out on the land.

Rural Housing Code

Yes, under the Rural Housing Code complying development may be carried out on the land.

Housing Alterations Code

Yes, under the Housing Alterations Code complying development may be carried out on the land.

General Development Code

Yes, under the General Development Code complying development may be carried out on the land.

Commercial and Industrial Alterations Code

Yes, under the General Commercial and Industrial Code complying development may be carried out on the land.

Commercial and Industrial (New Buildings and Additions) Code

Yes, under the General Commercial and Industrial (New Buildings and Additions) Code complying development may be carried out on the land.

Container Recycling Facilities Code

Yes, under the Container Recycling Facilities Code complying development may be carried out on the land.

Subdivisions Code

Yes, under the Subdivisions Code complying development may be carried out on the land.

Demolition Code

Yes, under the Demolition Code complying development may be carried out on the land.

Fire Safety Code

Yes, under the Fire Safety Code complying development may be carried out on the land.

ITEM 4 – Coastal protection

To the extent that the Council has been so notified by the Department of Finance, Services and Innovation is the land affected by the operation of section 38 or 39 of the Coastal Protection Act 1979?

No

ITEM 4A – Certain information relating to beaches and coasts

1. Has an order been made under Part 4D of the Coastal Protection Act 1979 in relation to temporary coastal protection works (within the meaning of that Act) on the land (or on public land adjacent to that land), except where Council is satisfied that such an order has been fully complied with?

No

2. (a) Has the Council been notified under section 55X of the Coastal Protection Act 1979 that temporary coastal protection works (within the meaning of that Act) have been placed on the land (or on public land adjacent to that land)?

No

(b) If the works have been so placed, is Council satisfied that the works have been removed and the land restored in accordance with that Act.

N/A

ITEM 4B – Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

Has the owner (or any previous owner) of the land consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)?

No

ITEM 5 – Mine subsidence

Is the land proclaimed to be in a mine subsidence district within the meaning of section 15 of the Mine Subsidence Compensation Act 1961?

No

ITEM 6 – Road widening and road realignment

Is the land affected by any road widening or road realignment under:

(a) Division 2 of Part 3 of the Roads Act 1993; or

(b) Any environmental planning instrument; or (c) Any resolution of the Council?

No

ITEM 7 – Council and other public authority policies on hazard risk restrictions

- (a) Whether or not the land is affected by a policy adopted by the Council that restricts the development of the land because of the likelihood of:-
 - (i) land slip No
 - (ii)bushfireNo(iii)tidal inundationNo
 - (iv) subsidence No
 - (v) acid sulphate soils Yes

The land is identified as being within Class 5 on the Acid Sulfate Soil Map under the Canada Bay LEP 2013. Works prohibited without Council approval (except as provided by subclause 4 of clause 6.1 of the Canada Bay LEP 2013) include:

• Works within 500 metres of adjacent Class 1, 2, 3 or 4 land that is below 5 metres Australian Height Datum by which the watertable is likely to be lowered below 1 metre Australian Height Datum on adjacent Class 1, 2, 3 or 4 land.

(vi) land contamination Yes

Council has adopted by resolution a policy on contaminated land that applies to all land within the City of Canada Bay. Please note that this statement refers to whether or not Council has a policy regarding contamination and is not a statement on whether the property is affected by contamination or potential contamination.

(b) Whether or not the land is affected by a policy adopted by any other public authority and notified to the Council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No

ITEM 7A – Flood related development controls information

1. Whether or not development on the land or part of the land for the purposes of dwelling houses, dual occupancies, multi dwelling housing or residential flat buildings (not including development for the purposes of group homes or seniors housing) is subject to flood related development controls.

No

2. Whether or not development on the land or part of the land for any other purpose is subject to flood related development controls.

No

ITEM 8 – Land reserved for acquisition

Is there an environmental planning instrument, or proposed environmental planning instrument referred to in clause 1 which makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Environmental Planning and Assessment Act 1979?

No

ITEM 9 – Contributions plans

The name of each contributions plan applying to the land is:-

City of Canada Bay S7.12 Fixed Levy Contributions Plan

Renewing Rhodes Contributions Framework

ITEM 9A - Biodiversity certified land

Is the land biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016 (including land certified under Part 7AA of the Threatened Species Conservation Act 1995)?

No

ITEM 10 – Biodiversity stewardship sites

Has Council been notified by the Chief Executive of the Office of Environment and Heritage that the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the Biodiversity Conservation Act 2016 (including biobanking agreements under Part 7A of the Threatened Species Conservation Act 1995)?

No

ITEM 10A – Native vegetation clearing set asides

Under section 60ZC of the Local Land Service Act 2013, has Council been notified by Local Land Services (or is it registered in the public register under that section) that the land contains a set aside area?

No

ITEM 11 – Bush fire prone land

(a)	All of the land is bush fire prone land.	No
(b)	Some of the land is bush fire prone land.	No
(c)	None of the land is bush fire prone land.	Yes

ITEM 12 – Property vegetation plans

Has Council been notified (by the person or body that approved the plan) of the existence of a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force) applying to the land?

No

ITEM 13 – Orders under Trees (Disputes Between Neighbours) Act 2006

Has Council been notified that an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land?

No

ITEM 14 – Directions under Part 3A

Is there a direction by the Minister in force under section 75P (2) (c1) of the Environmental Planning and Assessment Act 1979 that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect?

No

ITEM 15 – Site compatibility certificates and conditions for seniors housing

(a) Has a current site compatibility certificate (seniors housing), of which the Council is aware, been issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land?

No

(b) Have any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land? No

ITEM 16 – Site compatibility certificates for infrastructure, schools or TAFE establishments

Has a valid site compatibility certificate (infrastructure) or a site compatibility certificate (schools or TAFE establishments), of which the Council is aware, been issued?

No

ITEM 17 – Site compatibility certificates and conditions for affordable rental housing

1. Has a current site compatibility certificate (affordable rental housing), of which the Council is aware, been issued in respect of proposed development on the land?

No

2. Have any terms of a kind referred to in clause 17(1) or 38(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 been imposed as a condition of consent to a development application in respect of the land?

No

ITEM 18 – Paper subdivision information

Has a development plan been adopted that applies to the land or that is proposed to be subject to a consent ballot?

No

ITEM 19 – Site verification certificates

Has Council been made aware of a current site verification certificate that has been issued in respect of the land?

No

ITEM 20 – Loose – fill asbestos insulation

Has Council been notified that the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division?

No. Contact NSW Fair Trading for more information.

ITEM 21 – Affected building notices and building product rectification orders

1. Is any affected building notice in force in respect of the land?

No

2. Is any building product rectification order in force in respect of the land that has not been fully complied with?

No

3. Has a notice of intention to make a building product rectification order been given in respect of that land that is outstanding?

No

ITEM 22 – Matters arising under the Contaminated Land Management Act 1997

Section 59(2) of the Contaminated Land Management Act 1997 prescribes the following additional matters to be specified in planning certificates:-

(a) At the date of this certificate, is the land (or part of the land) to which this certificate relates significantly contaminated land?

No

(b) At the date of this certificate, is the land to which this certificate relates subject to a management order?

No

(c) At the date of this certificate, is the land to which this certificate relates the subject of an approved voluntary management proposal?

No

(d) At the date of this certificate, is the land to which this certificate relates subject to an ongoing maintenance order?

No

(e) At the date of this certificate, is the land to which this certificate relates the subject of a site audit statement and a copy of such a statement has been provided to the Council?

No

GENERAL INFORMATION

The absence of any reference to a matter affecting the land shall not imply that the land is not affected by that matter not referred to in this certificate.

Information provided under section 10.7(2) is in accordance with the matters prescribed under schedule 4 of the Environmental Planning and Assessment Regulation 2000 and is provided only

to the extent that the Council has been notified by the Department of Public Works or Department of Planning.

When advice in accordance with section 10.7(5) is requested the Council is under no obligation to furnish any advice. If advice is provided Council draws your attention to section 10.7(6) and schedule 6 of the *Environmental Planning and Assessment Act 1979* which have the effect that Council shall not incur any liability in respect of advice provided in good faith pursuant to section 10.7(5), including the furnishing of advice in respect of contaminated land.

Any enquiries regarding State and Regional Environmental Planning Policies should be directed to the Department of Planning at http://www.planning.nsw.gov.au

Please contact Council's Strategic Planning section for further information about this Planning Certificate.

Peter Gainsford General Manager



APPLICANT: Mr Oitmaa 96 Hermitage Road WEST RYDE NSW 2114

PLANNING CERTIFICATE - under section 10.7 Environmental Planning and Assessment Act 1979

Property: 3 Marquet Street RHODES NSW 2138

Title: Lot 4 DP 17671

Certificate No:	PC2018/1230	Certificate Date:	13/06/2018
Receipt No:	Online Receipt	Certificate Fee:	
Land No:	21464	Applicant's Ref:	86432

SECTION 10.7(2)

In accordance with the requirements of section 10.7(2) of the Environmental Planning and Assessment Act (1979) ("the Act"), the following prescribed matters relate to the land at the date of this certificate.

ITEM 1 -Names of relevant planning instruments and DCPs

1. The following environmental planning instruments apply to the carrying out of development on the land:

Canada Bay Local Environmental Plan 2013

Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

State Environmental Planning Policy No. 19 – Bushland in Urban Areas State Environmental Planning Policy No. 21 - Caravan Parks State Environmental Planning Policy No. 30 - Intensive Agriculture State Environmental Planning Policy No. 33 - Hazardous and Offensive Development State Environmental Planning Policy No. 50 - Canal Estates State Environmental Planning Policy No. 55 - Remediation of Land State Environmental Planning Policy No. 64 – Advertising and Signage State Environmental Planning Policy No. 65 - Design Quality of Residential Flat Development State Environmental Planning Policy No. 70 – Affordable Housing (Revised Schemes) State Environmental Planning Policy - SEPP (Housing for Seniors or People with a Disability) 2004 State Environmental Planning Policy – Building Sustainability Index: BASIX 2004 State Environmental Planning Policy - (Major Development) 2005 State Environmental Planning Policy - (Mining, Petroleum Production and Extractive Industries) 2007 State Environmental Planning Policy (Infrastructure) 2007 State Environment Planning Policy (Temporary Structures) 2007 State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 State Environmental Planning Policy (Repeal of Concurrence and Referral Provisions) 2008 State Environmental Planning Policy (Affordable Rental Housing) 2009 State Environmental Planning Policy (Urban Renewal) 2010 State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017 State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017

State Environmental Planning Policy (Coastal Management) 2018 (wholly within)

2. The following proposed environmental planning instruments apply to the carrying out of development on the land and are or have been the subject of community consultation or on public exhibition under the Environmental Planning and Assessment Act 1979:

Planning Proposal - Housekeeping amendments
3. The following development control plans apply to the carrying out of development on the land:

Rhodes West Development Control Plan

Sydney Harbour Foreshores & Waterways Area Development Control Plan

ITEM 2 - Zoning and land use under relevant LEPs

1. (a) Zoning details in the instruments identified in item 1(1) above

Zone B4 Mixed Use

1 Objectives of zone

- To provide a mixture of compatible land uses.
- To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.

2 Permitted without consent

Environmental protection works

3 Permitted with consent

Boarding houses; Building identification signs; Business identification signs; Child care centres; Commercial premises; Community facilities; Educational establishments; Entertainment facilities; Function centres; Hotel or motel accommodation; Information and education facilities; Light industries; Medical centres; Passenger transport facilities; Recreation facilities (indoor); Registered clubs; Residential flat buildings; Respite day care centres; Restricted premises; Roads; Seniors housing; Shop top housing; Any other development not specified in item 2 or 4

4 Prohibited

Agriculture; Air transport facilities; Airstrips; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Correctional centres; Crematoria; Depots; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Farm stay accommodation; Forestry; Freight transport facilities; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial training facilities; Industries; Jetties; Moorings; Open cut mining; Recreation facilities (major); Recreation facilities (outdoor); Residential accommodation; Resource recovery facilities; Rural industries; Sewage treatment plants; Signage; Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Warehouse or distribution centres; Waste disposal facilities; Water recreation structures; Water supply systems

Additional permitted uses

No additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to this land

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under an EPI

(d) Is the land within a heritage conservation area?

The land is not within a heritage conservation area

(e) Is there a heritage item situated on the land?

There are no heritage items situated on the land

2. (a) Zoning details in the instruments identified in item 1(2) above

Zone B4 Mixed Use

1 Objectives of zone

- To provide a mixture of compatible land uses.
- To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.

2 Permitted without consent

Environmental Protection Works;

3 Permitted with consent

Boarding houses; Building identification signs; Business identification signs; Centrebased child care facilities; Commercial premises; Community facilities; Educational establishments; Entertainment facilities; Function centres; Hotel or motel accommodation; Information and education facilities; Light industries; Medical centres; Passenger transport facilities; Recreation facilities (indoor); Registered clubs; Respite day care centres; Restricted premises; Roads; Seniors housing; Shop top housing; Any other development not specified in item 2 or 4.

4 Prohibited

Agriculture; Air transport facilities; Airstrips; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Correctional centres; Crematoria; Depots; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Farm stay accommodation; Forestry; Freight transport facilities; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial training facilities; Industries; Jetties; Moorings; Open cut mining; Recreation facilities (major); Recreation facilities (outdoor); Residential accommodation; Resource recovery facilities; Rural industries; Sewage treatment

plants; Signage; Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Warehouse or distribution centres; Waste disposal facilities; Water recreation structures; Water supply systems.

Additional permitted uses

No draft additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to the land under a draft environmental planning instrument

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under a draft EPI

(d) Is the land within a draft heritage conservation area?

The land is not within a draft heritage conservation area

(e) Is there a draft heritage item situated on the land?

There are no draft heritage items situated on the land

ITEM 2A - Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006

Is the land identified within any zone under Part 3 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006, a Precinct Plan, or a Proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act?

No

ITEM 3 – Complying Development Exclusions

Is the land, land on which complying development may be carried out under clauses 1.17A(1)(c) to (e),(2),(3) and (4), 1.18 (1)(c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008?

Housing Code

Yes, under the Housing Code complying development may be carried out on the land.

Rural Housing Code

Yes, under the Rural Housing Code complying development may be carried out on the land.

Housing Alterations Code

Yes, under the Housing Alterations Code complying development may be carried out on the land.

General Development Code

Yes, under the General Development Code complying development may be carried out on the land.

Commercial and Industrial Alterations Code

Yes, under the General Commercial and Industrial Code complying development may be carried out on the land.

Commercial and Industrial (New Buildings and Additions) Code

Yes, under the General Commercial and Industrial (New Buildings and Additions) Code complying development may be carried out on the land.

Container Recycling Facilities Code

Yes, under the Container Recycling Facilities Code complying development may be carried out on the land.

Subdivisions Code

Yes, under the Subdivisions Code complying development may be carried out on the land.

Demolition Code

Yes, under the Demolition Code complying development may be carried out on the land.

Fire Safety Code

Yes, under the Fire Safety Code complying development may be carried out on the land.

ITEM 4 – Coastal protection

To the extent that the Council has been so notified by the Department of Finance, Services and Innovation is the land affected by the operation of section 38 or 39 of the Coastal Protection Act 1979?

No

ITEM 4A – Certain information relating to beaches and coasts

1. Has an order been made under Part 4D of the Coastal Protection Act 1979 in relation to temporary coastal protection works (within the meaning of that Act) on the land (or on public land adjacent to that land), except where Council is satisfied that such an order has been fully complied with?

No

2. (a) Has the Council been notified under section 55X of the Coastal Protection Act 1979 that temporary coastal protection works (within the meaning of that Act) have been placed on the land (or on public land adjacent to that land)?

No

(b) If the works have been so placed, is Council satisfied that the works have been removed and the land restored in accordance with that Act.

N/A

ITEM 4B – Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

Has the owner (or any previous owner) of the land consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)?

No

ITEM 5 – Mine subsidence

Is the land proclaimed to be in a mine subsidence district within the meaning of section 15 of the Mine Subsidence Compensation Act 1961?

No

ITEM 6 – Road widening and road realignment

Is the land affected by any road widening or road realignment under:

(a) Division 2 of Part 3 of the Roads Act 1993; or

(b) Any environmental planning instrument; or (c) Any resolution of the Council?

No

ITEM 7 – Council and other public authority policies on hazard risk restrictions

- (a) Whether or not the land is affected by a policy adopted by the Council that restricts the development of the land because of the likelihood of:-
 - (i) land slip No
 - (ii)bushfireNo(iii)tidal inundationNo
 - (iv) subsidence No
 - (v) acid sulphate soils Yes

The land is identified as being within Class 5 on the Acid Sulfate Soil Map under the Canada Bay LEP 2013. Works prohibited without Council approval (except as provided by subclause 4 of clause 6.1 of the Canada Bay LEP 2013) include:

• Works within 500 metres of adjacent Class 1, 2, 3 or 4 land that is below 5 metres Australian Height Datum by which the watertable is likely to be lowered below 1 metre Australian Height Datum on adjacent Class 1, 2, 3 or 4 land.

(vi) land contamination Yes

Council has adopted by resolution a policy on contaminated land that applies to all land within the City of Canada Bay. Please note that this statement refers to whether or not Council has a policy regarding contamination and is not a statement on whether the property is affected by contamination or potential contamination.

(b) Whether or not the land is affected by a policy adopted by any other public authority and notified to the Council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No

ITEM 7A – Flood related development controls information

1. Whether or not development on the land or part of the land for the purposes of dwelling houses, dual occupancies, multi dwelling housing or residential flat buildings (not including development for the purposes of group homes or seniors housing) is subject to flood related development controls.

No

2. Whether or not development on the land or part of the land for any other purpose is subject to flood related development controls.

No

ITEM 8 – Land reserved for acquisition

Is there an environmental planning instrument, or proposed environmental planning instrument referred to in clause 1 which makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Environmental Planning and Assessment Act 1979?

No

ITEM 9 – Contributions plans

The name of each contributions plan applying to the land is:-

City of Canada Bay S7.12 Fixed Levy Contributions Plan

Renewing Rhodes Contributions Framework

ITEM 9A - Biodiversity certified land

Is the land biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016 (including land certified under Part 7AA of the Threatened Species Conservation Act 1995)?

No

ITEM 10 – Biodiversity stewardship sites

Has Council been notified by the Chief Executive of the Office of Environment and Heritage that the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the Biodiversity Conservation Act 2016 (including biobanking agreements under Part 7A of the Threatened Species Conservation Act 1995)?

No

ITEM 10A – Native vegetation clearing set asides

Under section 60ZC of the Local Land Service Act 2013, has Council been notified by Local Land Services (or is it registered in the public register under that section) that the land contains a set aside area?

No

ITEM 11 – Bush fire prone land

(a)	All of the land is bush fire prone land.	No
(b)	Some of the land is bush fire prone land.	No
(c)	None of the land is bush fire prone land.	Yes

ITEM 12 – Property vegetation plans

Has Council been notified (by the person or body that approved the plan) of the existence of a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force) applying to the land?

No

ITEM 13 – Orders under Trees (Disputes Between Neighbours) Act 2006

Has Council been notified that an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land?

No

ITEM 14 – Directions under Part 3A

Is there a direction by the Minister in force under section 75P (2) (c1) of the Environmental Planning and Assessment Act 1979 that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect?

No

ITEM 15 – Site compatibility certificates and conditions for seniors housing

(a) Has a current site compatibility certificate (seniors housing), of which the Council is aware, been issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land?

No

(b) Have any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land? No

ITEM 16 – Site compatibility certificates for infrastructure, schools or TAFE establishments

Has a valid site compatibility certificate (infrastructure) or a site compatibility certificate (schools or TAFE establishments), of which the Council is aware, been issued?

No

ITEM 17 – Site compatibility certificates and conditions for affordable rental housing

1. Has a current site compatibility certificate (affordable rental housing), of which the Council is aware, been issued in respect of proposed development on the land?

No

2. Have any terms of a kind referred to in clause 17(1) or 38(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 been imposed as a condition of consent to a development application in respect of the land?

No

ITEM 18 – Paper subdivision information

Has a development plan been adopted that applies to the land or that is proposed to be subject to a consent ballot?

No

ITEM 19 – Site verification certificates

Has Council been made aware of a current site verification certificate that has been issued in respect of the land?

No

ITEM 20 – Loose – fill asbestos insulation

Has Council been notified that the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division?

No. Contact NSW Fair Trading for more information.

ITEM 21 – Affected building notices and building product rectification orders

1. Is any affected building notice in force in respect of the land?

No

2. Is any building product rectification order in force in respect of the land that has not been fully complied with?

No

3. Has a notice of intention to make a building product rectification order been given in respect of that land that is outstanding?

No

ITEM 22 – Matters arising under the Contaminated Land Management Act 1997

Section 59(2) of the Contaminated Land Management Act 1997 prescribes the following additional matters to be specified in planning certificates:-

(a) At the date of this certificate, is the land (or part of the land) to which this certificate relates significantly contaminated land?

No

(b) At the date of this certificate, is the land to which this certificate relates subject to a management order?

No

(c) At the date of this certificate, is the land to which this certificate relates the subject of an approved voluntary management proposal?

No

(d) At the date of this certificate, is the land to which this certificate relates subject to an ongoing maintenance order?

No

(e) At the date of this certificate, is the land to which this certificate relates the subject of a site audit statement and a copy of such a statement has been provided to the Council?

No

GENERAL INFORMATION

The absence of any reference to a matter affecting the land shall not imply that the land is not affected by that matter not referred to in this certificate.

Information provided under section 10.7(2) is in accordance with the matters prescribed under schedule 4 of the Environmental Planning and Assessment Regulation 2000 and is provided only

to the extent that the Council has been notified by the Department of Public Works or Department of Planning.

When advice in accordance with section 10.7(5) is requested the Council is under no obligation to furnish any advice. If advice is provided Council draws your attention to section 10.7(6) and schedule 6 of the *Environmental Planning and Assessment Act 1979* which have the effect that Council shall not incur any liability in respect of advice provided in good faith pursuant to section 10.7(5), including the furnishing of advice in respect of contaminated land.

Any enquiries regarding State and Regional Environmental Planning Policies should be directed to the Department of Planning at http://www.planning.nsw.gov.au

Please contact Council's Strategic Planning section for further information about this Planning Certificate.

Peter Gainsford General Manager



APPLICANT: Mr Oitmaa 96 Hermitage Road WEST RYDE NSW 2114

PLANNING CERTIFICATE - under section 10.7 Environmental Planning and Assessment Act 1979

Property: 1 Marquet Street RHODES NSW 2138

Title: Lot 5 DP 17671

Certificate No:	PC2018/1231	Certificate Date:	13/06/2018
Receipt No:	Online Receipt	Certificate Fee:	
Land No:	21465	Applicant's Ref:	86432

SECTION 10.7(2)

In accordance with the requirements of section 10.7(2) of the Environmental Planning and Assessment Act (1979) ("the Act"), the following prescribed matters relate to the land at the date of this certificate.

ITEM 1 -Names of relevant planning instruments and DCPs

1. The following environmental planning instruments apply to the carrying out of development on the land:

Canada Bay Local Environmental Plan 2013

Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

State Environmental Planning Policy No. 19 – Bushland in Urban Areas State Environmental Planning Policy No. 21 - Caravan Parks State Environmental Planning Policy No. 30 - Intensive Agriculture State Environmental Planning Policy No. 33 - Hazardous and Offensive Development State Environmental Planning Policy No. 50 - Canal Estates State Environmental Planning Policy No. 55 - Remediation of Land State Environmental Planning Policy No. 64 – Advertising and Signage State Environmental Planning Policy No. 65 - Design Quality of Residential Flat Development State Environmental Planning Policy No. 70 – Affordable Housing (Revised Schemes) State Environmental Planning Policy - SEPP (Housing for Seniors or People with a Disability) 2004 State Environmental Planning Policy – Building Sustainability Index: BASIX 2004 State Environmental Planning Policy - (Major Development) 2005 State Environmental Planning Policy - (Mining, Petroleum Production and Extractive Industries) 2007 State Environmental Planning Policy (Infrastructure) 2007 State Environment Planning Policy (Temporary Structures) 2007 State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 State Environmental Planning Policy (Repeal of Concurrence and Referral Provisions) 2008 State Environmental Planning Policy (Affordable Rental Housing) 2009 State Environmental Planning Policy (Urban Renewal) 2010 State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017 State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017

State Environmental Planning Policy (Coastal Management) 2018 (wholly within)

2. The following proposed environmental planning instruments apply to the carrying out of development on the land and are or have been the subject of community consultation or on public exhibition under the Environmental Planning and Assessment Act 1979:

Planning Proposal - Housekeeping amendments

3. The following development control plans apply to the carrying out of development on the land:

Rhodes West Development Control Plan

Sydney Harbour Foreshores & Waterways Area Development Control Plan

ITEM 2 - Zoning and land use under relevant LEPs

1. (a) Zoning details in the instruments identified in item 1(1) above

Zone B4 Mixed Use

1 Objectives of zone

- To provide a mixture of compatible land uses.
- To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.

2 Permitted without consent

Environmental protection works

3 Permitted with consent

Boarding houses; Building identification signs; Business identification signs; Child care centres; Commercial premises; Community facilities; Educational establishments; Entertainment facilities; Function centres; Hotel or motel accommodation; Information and education facilities; Light industries; Medical centres; Passenger transport facilities; Recreation facilities (indoor); Registered clubs; Residential flat buildings; Respite day care centres; Restricted premises; Roads; Seniors housing; Shop top housing; Any other development not specified in item 2 or 4

4 Prohibited

Agriculture; Air transport facilities; Airstrips; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Correctional centres; Crematoria; Depots; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Farm stay accommodation; Forestry; Freight transport facilities; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial training facilities; Industries; Jetties; Moorings; Open cut mining; Recreation facilities (major); Recreation facilities (outdoor); Residential accommodation; Resource recovery facilities; Rural industries; Sewage treatment plants; Signage; Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Warehouse or distribution centres; Waste disposal facilities; Water recreation structures; Water supply systems

Additional permitted uses

No additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to this land

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under an EPI

(d) Is the land within a heritage conservation area?

The land is not within a heritage conservation area

(e) Is there a heritage item situated on the land?

There are no heritage items situated on the land

2. (a) Zoning details in the instruments identified in item 1(2) above

Zone B4 Mixed Use

1 Objectives of zone

- To provide a mixture of compatible land uses.
- To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.

2 Permitted without consent

Environmental Protection Works;

3 Permitted with consent

Boarding houses; Building identification signs; Business identification signs; Centrebased child care facilities; Commercial premises; Community facilities; Educational establishments; Entertainment facilities; Function centres; Hotel or motel accommodation; Information and education facilities; Light industries; Medical centres; Passenger transport facilities; Recreation facilities (indoor); Registered clubs; Respite day care centres; Restricted premises; Roads; Seniors housing; Shop top housing; Any other development not specified in item 2 or 4.

4 Prohibited

Agriculture; Air transport facilities; Airstrips; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Correctional centres; Crematoria; Depots; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Farm stay accommodation; Forestry; Freight transport facilities; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial training facilities; Industries; Jetties; Moorings; Open cut mining; Recreation facilities (major); Recreation facilities (outdoor); Residential accommodation; Resource recovery facilities; Rural industries; Sewage treatment

plants; Signage; Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Warehouse or distribution centres; Waste disposal facilities; Water recreation structures; Water supply systems.

Additional permitted uses

No draft additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to the land under a draft environmental planning instrument

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under a draft EPI

(d) Is the land within a draft heritage conservation area?

The land is not within a draft heritage conservation area

(e) Is there a draft heritage item situated on the land?

There are no draft heritage items situated on the land

ITEM 2A - Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006

Is the land identified within any zone under Part 3 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006, a Precinct Plan, or a Proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act?

No

ITEM 3 – Complying Development Exclusions

Is the land, land on which complying development may be carried out under clauses 1.17A(1)(c) to (e),(2),(3) and (4), 1.18 (1)(c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008?

Housing Code

Yes, under the Housing Code complying development may be carried out on the land.

Rural Housing Code

Yes, under the Rural Housing Code complying development may be carried out on the land.

Housing Alterations Code

Yes, under the Housing Alterations Code complying development may be carried out on the land.

General Development Code

Yes, under the General Development Code complying development may be carried out on the land.

Commercial and Industrial Alterations Code

Yes, under the General Commercial and Industrial Code complying development may be carried out on the land.

Commercial and Industrial (New Buildings and Additions) Code

Yes, under the General Commercial and Industrial (New Buildings and Additions) Code complying development may be carried out on the land.

Container Recycling Facilities Code

Yes, under the Container Recycling Facilities Code complying development may be carried out on the land.

Subdivisions Code

Yes, under the Subdivisions Code complying development may be carried out on the land.

Demolition Code

Yes, under the Demolition Code complying development may be carried out on the land.

Fire Safety Code

Yes, under the Fire Safety Code complying development may be carried out on the land.

ITEM 4 – Coastal protection

To the extent that the Council has been so notified by the Department of Finance, Services and Innovation is the land affected by the operation of section 38 or 39 of the Coastal Protection Act 1979?

No

ITEM 4A – Certain information relating to beaches and coasts

1. Has an order been made under Part 4D of the Coastal Protection Act 1979 in relation to temporary coastal protection works (within the meaning of that Act) on the land (or on public land adjacent to that land), except where Council is satisfied that such an order has been fully complied with?

No

2. (a) Has the Council been notified under section 55X of the Coastal Protection Act 1979 that temporary coastal protection works (within the meaning of that Act) have been placed on the land (or on public land adjacent to that land)?

No

(b) If the works have been so placed, is Council satisfied that the works have been removed and the land restored in accordance with that Act.

N/A

ITEM 4B – Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

Has the owner (or any previous owner) of the land consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)?

No

ITEM 5 – Mine subsidence

Is the land proclaimed to be in a mine subsidence district within the meaning of section 15 of the Mine Subsidence Compensation Act 1961?

No

ITEM 6 – Road widening and road realignment

Is the land affected by any road widening or road realignment under:

(a) Division 2 of Part 3 of the Roads Act 1993; or

(b) Any environmental planning instrument; or (c) Any resolution of the Council?

No

ITEM 7 – Council and other public authority policies on hazard risk restrictions

- (a) Whether or not the land is affected by a policy adopted by the Council that restricts the development of the land because of the likelihood of:-
 - (i) land slip No
 - (ii)bushfireNo(iii)tidal inundationNo
 - (iv) subsidence No
 - (v) acid sulphate soils Yes

The land is identified as being within Class 5 on the Acid Sulfate Soil Map under the Canada Bay LEP 2013. Works prohibited without Council approval (except as provided by subclause 4 of clause 6.1 of the Canada Bay LEP 2013) include:

• Works within 500 metres of adjacent Class 1, 2, 3 or 4 land that is below 5 metres Australian Height Datum by which the watertable is likely to be lowered below 1 metre Australian Height Datum on adjacent Class 1, 2, 3 or 4 land.

(vi) land contamination Yes

Council has adopted by resolution a policy on contaminated land that applies to all land within the City of Canada Bay. Please note that this statement refers to whether or not Council has a policy regarding contamination and is not a statement on whether the property is affected by contamination or potential contamination.

(b) Whether or not the land is affected by a policy adopted by any other public authority and notified to the Council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No

ITEM 7A – Flood related development controls information

1. Whether or not development on the land or part of the land for the purposes of dwelling houses, dual occupancies, multi dwelling housing or residential flat buildings (not including development for the purposes of group homes or seniors housing) is subject to flood related development controls.

No

2. Whether or not development on the land or part of the land for any other purpose is subject to flood related development controls.

No

ITEM 8 – Land reserved for acquisition

Is there an environmental planning instrument, or proposed environmental planning instrument referred to in clause 1 which makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Environmental Planning and Assessment Act 1979?

No

ITEM 9 – Contributions plans

The name of each contributions plan applying to the land is:-

City of Canada Bay S7.12 Fixed Levy Contributions Plan

Renewing Rhodes Contributions Framework

ITEM 9A - Biodiversity certified land

Is the land biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016 (including land certified under Part 7AA of the Threatened Species Conservation Act 1995)?

No

ITEM 10 – Biodiversity stewardship sites

Has Council been notified by the Chief Executive of the Office of Environment and Heritage that the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the Biodiversity Conservation Act 2016 (including biobanking agreements under Part 7A of the Threatened Species Conservation Act 1995)?

No

ITEM 10A – Native vegetation clearing set asides

Under section 60ZC of the Local Land Service Act 2013, has Council been notified by Local Land Services (or is it registered in the public register under that section) that the land contains a set aside area?

No

ITEM 11 – Bush fire prone land

(a)	All of the land is bush fire prone land.	No
(b)	Some of the land is bush fire prone land.	No
(c)	None of the land is bush fire prone land.	Yes

ITEM 12 – Property vegetation plans

Has Council been notified (by the person or body that approved the plan) of the existence of a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force) applying to the land?

No

ITEM 13 – Orders under Trees (Disputes Between Neighbours) Act 2006

Has Council been notified that an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land?

No

ITEM 14 – Directions under Part 3A

Is there a direction by the Minister in force under section 75P (2) (c1) of the Environmental Planning and Assessment Act 1979 that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect?

No

ITEM 15 – Site compatibility certificates and conditions for seniors housing

(a) Has a current site compatibility certificate (seniors housing), of which the Council is aware, been issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land?

No

(b) Have any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land? No

ITEM 16 – Site compatibility certificates for infrastructure, schools or TAFE establishments

Has a valid site compatibility certificate (infrastructure) or a site compatibility certificate (schools or TAFE establishments), of which the Council is aware, been issued?

No

ITEM 17 – Site compatibility certificates and conditions for affordable rental housing

1. Has a current site compatibility certificate (affordable rental housing), of which the Council is aware, been issued in respect of proposed development on the land?

No

2. Have any terms of a kind referred to in clause 17(1) or 38(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 been imposed as a condition of consent to a development application in respect of the land?

No

ITEM 18 – Paper subdivision information

Has a development plan been adopted that applies to the land or that is proposed to be subject to a consent ballot?

No

ITEM 19 – Site verification certificates

Has Council been made aware of a current site verification certificate that has been issued in respect of the land?

No

ITEM 20 – Loose – fill asbestos insulation

Has Council been notified that the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division?

No. Contact NSW Fair Trading for more information.

ITEM 21 – Affected building notices and building product rectification orders

1. Is any affected building notice in force in respect of the land?

No

2. Is any building product rectification order in force in respect of the land that has not been fully complied with?

No

3. Has a notice of intention to make a building product rectification order been given in respect of that land that is outstanding?

No

ITEM 22 – Matters arising under the Contaminated Land Management Act 1997

Section 59(2) of the Contaminated Land Management Act 1997 prescribes the following additional matters to be specified in planning certificates:-

(a) At the date of this certificate, is the land (or part of the land) to which this certificate relates significantly contaminated land?

No

(b) At the date of this certificate, is the land to which this certificate relates subject to a management order?

No

(c) At the date of this certificate, is the land to which this certificate relates the subject of an approved voluntary management proposal?

No

(d) At the date of this certificate, is the land to which this certificate relates subject to an ongoing maintenance order?

No

(e) At the date of this certificate, is the land to which this certificate relates the subject of a site audit statement and a copy of such a statement has been provided to the Council?

No

GENERAL INFORMATION

The absence of any reference to a matter affecting the land shall not imply that the land is not affected by that matter not referred to in this certificate.

Information provided under section 10.7(2) is in accordance with the matters prescribed under schedule 4 of the Environmental Planning and Assessment Regulation 2000 and is provided only

to the extent that the Council has been notified by the Department of Public Works or Department of Planning.

When advice in accordance with section 10.7(5) is requested the Council is under no obligation to furnish any advice. If advice is provided Council draws your attention to section 10.7(6) and schedule 6 of the *Environmental Planning and Assessment Act 1979* which have the effect that Council shall not incur any liability in respect of advice provided in good faith pursuant to section 10.7(5), including the furnishing of advice in respect of contaminated land.

Any enquiries regarding State and Regional Environmental Planning Policies should be directed to the Department of Planning at http://www.planning.nsw.gov.au

Please contact Council's Strategic Planning section for further information about this Planning Certificate.

Peter Gainsford General Manager



APPLICANT: Mr Oitmaa 96 Hermitage Road WEST RYDE NSW 2114

PLANNING CERTIFICATE - under section 10.7 Environmental Planning and Assessment Act 1979

Property: 4 Mary Street RHODES NSW 2138

Title: Lot 6 DP 17671

Certificate No:	PC2018/1232	Certificate Date:	13/06/2018
Receipt No:	Online Receipt	Certificate Fee:	
Land No:	21466	Applicant's Ref:	86432

SECTION 10.7(2)

In accordance with the requirements of section 10.7(2) of the Environmental Planning and Assessment Act (1979) ("the Act"), the following prescribed matters relate to the land at the date of this certificate.

ITEM 1 -Names of relevant planning instruments and DCPs

1. The following environmental planning instruments apply to the carrying out of development on the land:

Canada Bay Local Environmental Plan 2013

Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

State Environmental Planning Policy No. 19 – Bushland in Urban Areas State Environmental Planning Policy No. 21 - Caravan Parks State Environmental Planning Policy No. 30 - Intensive Agriculture State Environmental Planning Policy No. 33 - Hazardous and Offensive Development State Environmental Planning Policy No. 50 - Canal Estates State Environmental Planning Policy No. 55 - Remediation of Land State Environmental Planning Policy No. 64 – Advertising and Signage State Environmental Planning Policy No. 65 - Design Quality of Residential Flat Development State Environmental Planning Policy No. 70 – Affordable Housing (Revised Schemes) State Environmental Planning Policy - SEPP (Housing for Seniors or People with a Disability) 2004 State Environmental Planning Policy – Building Sustainability Index: BASIX 2004 State Environmental Planning Policy - (Major Development) 2005 State Environmental Planning Policy - (Mining, Petroleum Production and Extractive Industries) 2007 State Environmental Planning Policy (Infrastructure) 2007 State Environment Planning Policy (Temporary Structures) 2007 State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 State Environmental Planning Policy (Repeal of Concurrence and Referral Provisions) 2008 State Environmental Planning Policy (Affordable Rental Housing) 2009 State Environmental Planning Policy (Urban Renewal) 2010 State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017 State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017

State Environmental Planning Policy (Coastal Management) 2018 (wholly within)

2. The following proposed environmental planning instruments apply to the carrying out of development on the land and are or have been the subject of community consultation or on public exhibition under the Environmental Planning and Assessment Act 1979:

Planning Proposal - Housekeeping amendments

3. The following development control plans apply to the carrying out of development on the land:

Rhodes West Development Control Plan

Sydney Harbour Foreshores & Waterways Area Development Control Plan

ITEM 2 - Zoning and land use under relevant LEPs

1. (a) Zoning details in the instruments identified in item 1(1) above

Zone B4 Mixed Use

1 Objectives of zone

- To provide a mixture of compatible land uses.
- To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.

2 Permitted without consent

Environmental protection works

3 Permitted with consent

Boarding houses; Building identification signs; Business identification signs; Child care centres; Commercial premises; Community facilities; Educational establishments; Entertainment facilities; Function centres; Hotel or motel accommodation; Information and education facilities; Light industries; Medical centres; Passenger transport facilities; Recreation facilities (indoor); Registered clubs; Residential flat buildings; Respite day care centres; Restricted premises; Roads; Seniors housing; Shop top housing; Any other development not specified in item 2 or 4

4 Prohibited

Agriculture; Air transport facilities; Airstrips; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Correctional centres; Crematoria; Depots; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Farm stay accommodation; Forestry; Freight transport facilities; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial training facilities; Industries; Jetties; Moorings; Open cut mining; Recreation facilities (major); Recreation facilities (outdoor); Residential accommodation; Resource recovery facilities; Rural industries; Sewage treatment plants; Signage; Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Warehouse or distribution centres; Waste disposal facilities; Water recreation structures; Water supply systems

Additional permitted uses

No additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to this land

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under an EPI

(d) Is the land within a heritage conservation area?

The land is not within a heritage conservation area

(e) Is there a heritage item situated on the land?

There are no heritage items situated on the land

2. (a) Zoning details in the instruments identified in item 1(2) above

Zone B4 Mixed Use

1 Objectives of zone

- To provide a mixture of compatible land uses.
- To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.

2 Permitted without consent

Environmental Protection Works;

3 Permitted with consent

Boarding houses; Building identification signs; Business identification signs; Centrebased child care facilities; Commercial premises; Community facilities; Educational establishments; Entertainment facilities; Function centres; Hotel or motel accommodation; Information and education facilities; Light industries; Medical centres; Passenger transport facilities; Recreation facilities (indoor); Registered clubs; Respite day care centres; Restricted premises; Roads; Seniors housing; Shop top housing; Any other development not specified in item 2 or 4.

4 Prohibited

Agriculture; Air transport facilities; Airstrips; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Correctional centres; Crematoria; Depots; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Farm stay accommodation; Forestry; Freight transport facilities; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial training facilities; Industries; Jetties; Moorings; Open cut mining; Recreation facilities (major); Recreation facilities (outdoor); Residential accommodation; Resource recovery facilities; Rural industries; Sewage treatment

plants; Signage; Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Warehouse or distribution centres; Waste disposal facilities; Water recreation structures; Water supply systems.

Additional permitted uses

No draft additional uses apply

(b) Are there development standards applying to the land, which fix minimum land dimensions for the erection of a dwelling house on the land?

No fixed minimum land dimensions apply to the land under a draft environmental planning instrument

(c) Does the land include or comprise critical habitat?

The land does not include or comprise critical habitat under a draft EPI

(d) Is the land within a draft heritage conservation area?

The land is not within a draft heritage conservation area

(e) Is there a draft heritage item situated on the land?

There are no draft heritage items situated on the land

ITEM 2A - Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006

Is the land identified within any zone under Part 3 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006, a Precinct Plan, or a Proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act?

No

ITEM 3 – Complying Development Exclusions

Is the land, land on which complying development may be carried out under clauses 1.17A(1)(c) to (e),(2),(3) and (4), 1.18 (1)(c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008?

Housing Code

Yes, under the Housing Code complying development may be carried out on the land.

Rural Housing Code

Yes, under the Rural Housing Code complying development may be carried out on the land.

Housing Alterations Code

Yes, under the Housing Alterations Code complying development may be carried out on the land.

General Development Code

Yes, under the General Development Code complying development may be carried out on the land.

Commercial and Industrial Alterations Code

Yes, under the General Commercial and Industrial Code complying development may be carried out on the land.

Commercial and Industrial (New Buildings and Additions) Code

Yes, under the General Commercial and Industrial (New Buildings and Additions) Code complying development may be carried out on the land.

Container Recycling Facilities Code

Yes, under the Container Recycling Facilities Code complying development may be carried out on the land.

Subdivisions Code

Yes, under the Subdivisions Code complying development may be carried out on the land.

Demolition Code

Yes, under the Demolition Code complying development may be carried out on the land.

Fire Safety Code

Yes, under the Fire Safety Code complying development may be carried out on the land.

ITEM 4 – Coastal protection

To the extent that the Council has been so notified by the Department of Finance, Services and Innovation is the land affected by the operation of section 38 or 39 of the Coastal Protection Act 1979?

No

ITEM 4A – Certain information relating to beaches and coasts

1. Has an order been made under Part 4D of the Coastal Protection Act 1979 in relation to temporary coastal protection works (within the meaning of that Act) on the land (or on public land adjacent to that land), except where Council is satisfied that such an order has been fully complied with?

No

2. (a) Has the Council been notified under section 55X of the Coastal Protection Act 1979 that temporary coastal protection works (within the meaning of that Act) have been placed on the land (or on public land adjacent to that land)?

No

(b) If the works have been so placed, is Council satisfied that the works have been removed and the land restored in accordance with that Act.

N/A

ITEM 4B – Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

Has the owner (or any previous owner) of the land consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act)?

No

ITEM 5 – Mine subsidence

Is the land proclaimed to be in a mine subsidence district within the meaning of section 15 of the Mine Subsidence Compensation Act 1961?

No

ITEM 6 – Road widening and road realignment

Is the land affected by any road widening or road realignment under:

(a) Division 2 of Part 3 of the Roads Act 1993; or

(b) Any environmental planning instrument; or (c) Any resolution of the Council?

No

ITEM 7 – Council and other public authority policies on hazard risk restrictions

- (a) Whether or not the land is affected by a policy adopted by the Council that restricts the development of the land because of the likelihood of:-
 - (i) land slip No
 - (ii) bushfire No
 - (iii) tidal inundation No
 - (iv) subsidence No
 - (v) acid sulphate soils Yes

The land is identified as being within Class 5 on the Acid Sulfate Soil Map under the Canada Bay LEP 2013. Works prohibited without Council approval (except as provided by subclause 4 of clause 6.1 of the Canada Bay LEP 2013) include:

• Works within 500 metres of adjacent Class 1, 2, 3 or 4 land that is below 5 metres Australian Height Datum by which the watertable is likely to be lowered below 1 metre Australian Height Datum on adjacent Class 1, 2, 3 or 4 land.

(vi) land contamination Yes

Council has adopted by resolution a policy on contaminated land that applies to all land within the City of Canada Bay. Please note that this statement refers to whether or not Council has a policy regarding contamination and is not a statement on whether the property is affected by contamination or potential contamination.

(b) Whether or not the land is affected by a policy adopted by any other public authority and notified to the Council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the Council that restricts the development of the land because of the likelihood of:-

(i)	land slip	No
(ii)	bushfire	No
(iii)	tidal inundation	No
(iv)	subsidence	No
(v)	acid sulphate soils	No
(vi)	land contamination	No

ITEM 7A – Flood related development controls information

1. Whether or not development on the land or part of the land for the purposes of dwelling houses, dual occupancies, multi dwelling housing or residential flat buildings (not including development for the purposes of group homes or seniors housing) is subject to flood related development controls.

No

2. Whether or not development on the land or part of the land for any other purpose is subject to flood related development controls.

No

ITEM 8 – Land reserved for acquisition

Is there an environmental planning instrument, or proposed environmental planning instrument referred to in clause 1 which makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Environmental Planning and Assessment Act 1979?

No

ITEM 9 – Contributions plans

The name of each contributions plan applying to the land is:-

City of Canada Bay S7.12 Fixed Levy Contributions Plan

Renewing Rhodes Contributions Framework

ITEM 9A - Biodiversity certified land

Is the land biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016 (including land certified under Part 7AA of the Threatened Species Conservation Act 1995)?

No

ITEM 10 – Biodiversity stewardship sites

Has Council been notified by the Chief Executive of the Office of Environment and Heritage that the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the Biodiversity Conservation Act 2016 (including biobanking agreements under Part 7A of the Threatened Species Conservation Act 1995)?

No

ITEM 10A – Native vegetation clearing set asides

Under section 60ZC of the Local Land Service Act 2013, has Council been notified by Local Land Services (or is it registered in the public register under that section) that the land contains a set aside area?

No

ITEM 11 – Bush fire prone land

(a)	All of the land is bush fire prone land.	No
(b)	Some of the land is bush fire prone land.	No
(c)	None of the land is bush fire prone land.	Yes

ITEM 12 – Property vegetation plans

Has Council been notified (by the person or body that approved the plan) of the existence of a property vegetation plan approved under Part 4 of the Native Vegetation Act 2003 (and that continues in force) applying to the land?

No

ITEM 13 – Orders under Trees (Disputes Between Neighbours) Act 2006

Has Council been notified that an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land?

No

ITEM 14 – Directions under Part 3A

Is there a direction by the Minister in force under section 75P (2) (c1) of the Environmental Planning and Assessment Act 1979 that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect?

No

ITEM 15 – Site compatibility certificates and conditions for seniors housing

(a) Has a current site compatibility certificate (seniors housing), of which the Council is aware, been issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land?

No

(b) Have any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land? No

ITEM 16 – Site compatibility certificates for infrastructure, schools or TAFE establishments

Has a valid site compatibility certificate (infrastructure) or a site compatibility certificate (schools or TAFE establishments), of which the Council is aware, been issued?

No

ITEM 17 – Site compatibility certificates and conditions for affordable rental housing

1. Has a current site compatibility certificate (affordable rental housing), of which the Council is aware, been issued in respect of proposed development on the land?

No

2. Have any terms of a kind referred to in clause 17(1) or 38(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 been imposed as a condition of consent to a development application in respect of the land?

No

ITEM 18 – Paper subdivision information

Has a development plan been adopted that applies to the land or that is proposed to be subject to a consent ballot?

No

ITEM 19 – Site verification certificates

Has Council been made aware of a current site verification certificate that has been issued in respect of the land?

No

ITEM 20 – Loose – fill asbestos insulation

Has Council been notified that the land includes any residential premises (within the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division?

No. Contact NSW Fair Trading for more information.

ITEM 21 – Affected building notices and building product rectification orders

1. Is any affected building notice in force in respect of the land?

No

2. Is any building product rectification order in force in respect of the land that has not been fully complied with?

No

3. Has a notice of intention to make a building product rectification order been given in respect of that land that is outstanding?

No

ITEM 22 – Matters arising under the Contaminated Land Management Act 1997

Section 59(2) of the Contaminated Land Management Act 1997 prescribes the following additional matters to be specified in planning certificates:-

(a) At the date of this certificate, is the land (or part of the land) to which this certificate relates significantly contaminated land?

No

(b) At the date of this certificate, is the land to which this certificate relates subject to a management order?

No

(c) At the date of this certificate, is the land to which this certificate relates the subject of an approved voluntary management proposal?

No

(d) At the date of this certificate, is the land to which this certificate relates subject to an ongoing maintenance order?

No

(e) At the date of this certificate, is the land to which this certificate relates the subject of a site audit statement and a copy of such a statement has been provided to the Council?

No

GENERAL INFORMATION

The absence of any reference to a matter affecting the land shall not imply that the land is not affected by that matter not referred to in this certificate.

Information provided under section 10.7(2) is in accordance with the matters prescribed under schedule 4 of the Environmental Planning and Assessment Regulation 2000 and is provided only
to the extent that the Council has been notified by the Department of Public Works or Department of Planning.

When advice in accordance with section 10.7(5) is requested the Council is under no obligation to furnish any advice. If advice is provided Council draws your attention to section 10.7(6) and schedule 6 of the *Environmental Planning and Assessment Act 1979* which have the effect that Council shall not incur any liability in respect of advice provided in good faith pursuant to section 10.7(5), including the furnishing of advice in respect of contaminated land.

Any enquiries regarding State and Regional Environmental Planning Policies should be directed to the Department of Planning at http://www.planning.nsw.gov.au

Please contact Council's Strategic Planning section for further information about this Planning Certificate.

Peter Gainsford General Manager

Appendix F

Site Photographs



Photo 1 - Front of 9 Marquet St looking east



Photo 2 - Rear of 9 Marquet St looking east







Photo 4 - Between 5 and 7 Marquet St looking east







Photo 6 - Between 1 and 3 Marquet St looking east







Photo 9 - Rear of 5 Marquet St looking north



Photo 10 - Rear of 4 Mary St looking north



Site Photographs	PROJECT:	86432.00
Mary/Marquet Streets	PLATE No:	5
Rhodes	REV:	0
CLIENT: Forte Sydney Property Group	DATE:	13-Jun-18

Forte Sydney Property Group

4 Mary Street and 1-9 Marquet Street, Rhodes Planning Proposal (PP)

Transport Assessment

June 2018

Henson Consulting

Document Verification

Page 1 of 1

Job title:	title: 4 Mary Street and 1-9 Marquet Street, Rhodes - Transport Assessment.	
Document title:	Transport Assessment	
Approved:	Colin Henson, Fellow PIA, MIEAust, CPEng, MITE	
Date and Version:	21 June 2018 Issue	
Disclaimer:	This report takes into account the particular instruction our client. It is not intended for and should not be reliparty and no responsibility is undertaken to any third	lied upon by any third
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Service Vehicle access and analysis of projected queuing at

Figure 6: Rhodes East Structure Plan (Roberts Day, 2016.

Figure 7: Proposed maximum parking rates for Rhodes East

Figure 8: Marquet Street from Mary Street, looking north (subject site on right/east corner).

Figure 9: Marquet Street mid-bloc, looking north

Figure 10: Intersection of Marquet Street looking west along Gauthorpe St.

Figure 11; Rider Boulevarde looking east along Mary Street

Figure 12: Mary Street west of rider Boulevarde, looking north

Figure 13: Rhodes Peninsula 7 Day AADT (Annual Average Daily Traffic)

Figure 14: 85th Percentile Speeds of Vehicles

Figure 15: Public transport Services

Figure 16: Survey intersection of Mary St/Rider Boulevard and Walker Street/Gauthorpe Street

Figure 17: Traffic on Marquet Street, 40m north of Mary Street, combined directions.

Figure 18: Driveway to 7 Rider Boulevard

Figure 19: Traffic generation of 7 Rider Ave

Figure 20: Rhodes Peninsula Traffic Crashes, 2008-2013

Figure 21: Mode Split: Travel to Work (ABS Census 2011, Rhodes –State Suburb)

Figure 22: Mode Share Targets for Rhodes East by Jacobs 2017

Figure 23: Traffic Generation Rates

Figure 24: Proposed Car Parking Options

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5.10

6.1

6.2

63

Evaluation

entrances

Parking

Methodology

Traffic Generation

1 Introduction

1.1 Scope of Report, and Study Process

Henson Consulting was commissioned by Forte Property Group Pty Ltd (Forte) in May 2018 to undertake an assessment of transport for a proposed residential and commercial development at 4 Mary Rhodes and 1-9 Marquet Street (the subject site) in Rhodes, on the Parramatta River west of Sydney CBD.

This Planning Proposal (PP) stage transport assessment and report was prepared with reference to relevant Australian Standards and controls. A more detailed transport assessment including recent traffic counts and traffic engineering analysis will be submitted at Development Application (DA) stage.

1.2 Key Issues and Objectives

The objective of the study was to assess transport impacts including:

- The accessibility of the precinct by a range of transport modes including car, public transport, walking and cycling;
- Means of minimising travel demand by car and maximising the share of travel by other modes including public transport, cycling and walking, or car share;
- Compliance with the requirements of planning controls including the Local Environment Plan (LEP) and Development Control Plan (DCP);
- Justification of car parking provision and precinct servicing arrangements
- Access for the mobility impaired;
- Means of accommodating and integrating trips generated by the development including necessary improvements to public transport services, pedestrian systems, bicycle routes, and the road network;
- Means of mitigating any adverse impacts of the development on movement systems;
- Impacts on and means of improving pedestrian and road user safety;

1.3 Existing Studies and Reports and Guidelines

Existing studies and reports include area studies by Council and the RMS NSW on some nearby roads, and a range of NSW Government departments. The key transport guidelines taken into account in this study include the following and local studies reported in following chapters:

- Austroads Guidelines
- Guidelines to Traffic Generating Developments, RMS NSW
- Australian Standard AS/NZS 2890.1 2004 Parking facilities Part 1: Offstreet car parking
- Australian Standard AS 2890.2 2002 -Off-Street Parking Part 2: Commercial vehicle facilities.
- Australian Standard AS 2890.3 2013 Parking Facilities Part 3: Bicycle Parking Facilities

- Australian Standard AS2890.6 2009 Off Street Parking for People with Disabilities; and other guidelines for the mobility impaired and other access requirements including vision impairment
- 'Planning Guidelines for Walking and Cycling', Department of Infrastructure, Planning and Natural Resources December 2004.
- NSW Bike Plan (May 2010).

1.4 Scope of This Report

Rhodes was originally strongly influenced by its geographical location on the river, and subsequently by the opportunity and severance created by the rail line and Metroad Route 3/A3 road upgradings. The Secondary Study Area is the whole of the Rhodes Peninsula and its transport connections, including East Rhodes. The Primary Study Area is the area bounded by the railway, Gauthorpe St, Marquet Street, and Mary Street.



Figure 1: Secondary Study Area



Figure 2: Site Context

Figure 3: Primary Study Area, showing Subject site



The following sections of this report include:

- Studies and Reports
- Existing Conditions
- Future Development
- Proposed Subject PP Development
- Evaluation
- Conclusions

2 Studies and Reports

2.1 Introduction

The key background transport reports include government strategies and transport reports by Stapleton, Arup, GTA, Jacobs and Henson Consulting.

2.2 Government Reports

2.2.1 NSW: Making it Happen

NSW: Making it Happen replaces the State's previous 10-year plan, NSW 2021. NSW: Making it Happen outlines 30 key reforms for the State to grow the economy, deliver infrastructure, and improve health, education and other services across NSW. Priorities of relevance to the Rhodes East Priority Precinct include creating jobs, building infrastructure, improving government services, accelerating major project assessment, increasing housing supply, improving road travel reliability, ensure on-time running for public transport, and increasing cultural participation.

2.2.2 A Plan for Growing Sydney

A Plan for Growing Sydney (December 2014) details the NSW State Government's plan for the future development of the greater Sydney region. This includes identifying key goals, directions and actions for the future growth and prosperity of Sydney, and guiding land use planning decisions. The Plan's vision is for Sydney to be a strong global city and a great place to live. Rhodes is specifically identified in the plan as a Strategic Centre to be revitalised. Rhodes East can make a positive contribution¹ to the goals of a Plan for Growing Sydney by:

- Creating opportunities for the delivery of new housing which will enhance housing affordability and choice. Housing is to be delivered within the existing footprint as urban renewal and infill development.
- Increase the potential for new jobs within the Priority Precinct through creating opportunities for new commercial / retail spacesand in close proximity to Rhodes Station.
- Encouraging the use of existing public transport by providing increased density in close proximity to Rhodes Station and existing bus routes.
- Creating a framework for the delivery of new infrastructure to support an increased population including but not limited to: open spaces, augmented road network and cultural and community facilities.

2.2.3 New South Wales Long Term Transport Master Plan

The NSW Long Term Transport Master Plan identifies objectives which focus on improving liveability and supporting economic growth and productivity. These objectives are to be facilitated by the provision of a transport network which

¹ DPE website

reduces journey times, improves connectivity, increases efficiency and provides services to support job growth in centres close to where people live. There is an emphasis on the delivery of more transit orientated development both as part of urban renewal projects and in new developments.

The Rhodes East Priority Precinct seeks to increase transit oriented development in close proximity of Rhodes train station. These precincts are situated within two strategic transport corridors as well as the potential extension of WestConnex, are ideally suited to increase pedestrian and cycling trips and mobility.

2.2.4 Rebuilding NSW - State Infrastructure Strategy 2014 – Update (February 2015)

This Strategy highlights the importance of sustaining productivity growth in our major centres and our regional communities, as well as supporting population growth toward almost 6 million people in Sydney and more than 9 million people in NSW. The Strategy aims to ensure that appropriate water, transport, education, health, sports and arts infrastructure is provided for the growing community. Projects will be considered carefully against strategic priorities contained within long term planning documents. Highlighted projects of relevance to the Rhodes East precinct includes investment in the WestConnex southern extension, Sydney Metro and Urban Roads Pinch Points program.

2.2.5 State Environmental Planning Policy No 65 (SEPP 65) and the Apartment Design Guide

SEPP 65 provides controls relating to residential flat buildings and is supported by the Apartment Design Guides which provides guidance on the design of apartments and mixed-use development.

2.2.6 Canada Bay Development Control Plan (DCP) 2013

The DCP provides detailed controls for the wider Canada Bay LGA which support the LEP controls. These controls relate to matters such as: Setbacks, Building massing, Landscaping, Sustainable building design, Parking rates, Public domain interfaces, and Precinct controls.

2.2.7 Rhodes West Development Control Plan (DCP) 2015

The DCP provides a framework plan to set the urban design structure for development sites; and development controls for the public and private domain. This includes transport, pedestrian and bike controls, parking rates and vehicle access restrictions.

2.2.8 City of Canada Bay Local Planning Strategy 2010-2031

The purpose of the Local Planning Strategy (LPS) is to provide a framework for future land use planning in the City of Canada Bay to guide the preparation of the new Local Environmental Plan (LEP) and Development Control Plan (DCP). The

LPS is required to ensure that the Metropolitan Strategy for Sydney and the draft Inner West Sub-Regional Strategy are implemented at a local level.

2.2.9 Canada Bay Futures Plan 20

Futures Plan 20 (FP 20) is a whole of community blueprint for the future of the City of Canada Bay. FP20 was first developed in 2008 based on what the community saw as its vision for the city. It was updated in 2010 and was reviewed, revised and readopted in 2013 after extensive community and stakeholder consultation and engagement.

2.2.10 City of Canada Bay Section 94 Contributions Plan 2015

The Contributions Plan provides the legal and administrative mechanisms to require contributions in cash or, in some cases, by in-kind works or the dedication of land, towards the provision or embellishment of public amenities and services within the City of Canada Bay.

2.2.11 City of Canada Bay Section 94A Levy Contributions Plan 2008

The Section 94A Contributions Plan relates to non-residential development including new retail, commercial and industrial developments and major alterations to existing developments (in addition to new and modifications to dwellings houses on existing lots).

2.1 Bike Plan

The City of Canada Bay Bike Plan is based on a series of previous studies including the Strategic Review of the Canada Bay Bike Plan². A Homebush Bay Cycling Map (September 2016) has been produced that shows Rider Boulevard/Mary Street/Walker Street as a purple bike path on-road, the foreshore, bridge and rail frontages as orange shared path, and shows Gauthorpe Street as a green future bike path. All of these serve the Subject Site.

² Transport and Urban Planning, April 2014



Figure 4: Cycling Map

2.2 Stapleton Study

Traffic studies by Stapleton Transportation and Planning 2012 for Council were reviewed by authorities. One of the major issues which has regularly been raised by the community in relation to the Rhodes Peninsula is access to and from the area, and the management of traffic and parking issues associated with the development of the area.

The Strategy has been implemented through specific planning controls, i.e. reducing the car parking rate to be a maximum of an average of 1 space per dwelling, and lobbying for improvements to bus and train services. Council's strategy is gradually working, with car ownership levels dropping and public transport patronage increasing. This was verified in the 2011 Census with the number of residents who don't own a vehicle increasing from 9.8% in 2006, to 15.2% in 2011. The counts conducted with the completion of 50% of dwellings indicates the traffic generation is about 35% less than the demand considered in the original analysis of 5,440 dwellings in Rhodes.

2.3 Homebush Bay Bridge

The Arup³ transport report outlined the design and effects of the Homebush Bay Bridge ⁴ in improving the mode share to public transport. The Homebush Bay Bridge Traffic Management and Access Report (prepared by consultant Arup dated 16 January 2012) indicated that future bus movements across the Homebush Bay Bridge would be approximately 20 buses per hour (10 buses in each direction across the bridge). The bridge has since opened and is operating as planned.

³ Arup: Homebush Bay Bridge Traffic Management and Access 16 Jan 2012

⁴ MAJOR PROJECT ASSESSMENT: Homebush Bay Bridge, Homebush Bay, between

Wentworth Point and Rhodes (MP10_0192) Director-General's Environmental Assessment Report Section 75I of the Environmental Planning and Assessment Act 1979 March 2013

2.4 Rhodes Station Precinct Proposed Uplift Traffic Study, GTA Report

The report ⁵ assesses additional development potential given current conditions and future planned infrastructure provisions (including the proposed Homebush Bay Bridge) and changes in travel behaviour.

The GTA report⁶ was based on traffic generation based on parking spaces nominated by the number of units. In May 2014 GTA Consultants produced a Traffic Assessment Report for Station Precinct D on behalf of the developer Billbergia Group. Council subsequently engaged Henson Consulting in August 2014 to undertake a Transport Assessment and focus on public domain works around the Station Precinct. The GTA report primarily addressed matters relating to the traffic and parking generation resulting from the development.

2.5 Station Precinct Study by Henson Consulting

The objective of the study⁷ was to assess precinct functions and the pre-eminence of non-car modes. Pedestrian flows around the station may increase to 3200 pedestrians per hour around the station. This is considerably more than the existing hourly flow of vehicles along Walker Street (current approximately 800 vehicles per hour and 8 000 vehicles per day) and future traffic flows. Bike volumes may increase to over 200 bikes per hour. This is consistent with NSW Government and Council policy to prioritise users of Rhodes Station Precinct as:

- 1. Mobility impaired persons
- 2. Emergency services
- 3. Pedestrians including children
- 4. Cyclists
- 5. Bus/train/taxi
- 6. Service vehicles
- 7. Cars

This study recommended the Walker Street Primary road hierarchy Option 1a. Walker Street and Rider Boulevard remain the primary route through West Rhodes. Marquet Street and Gauthorpe Street carry less through traffic, and provide access driveways to servicing and car parking.

2.6 Homebush Bay Bridge Cycling Strategy ⁸

The bridge has been designed to carry public buses, maintenance and emergency vehicles, pedestrians, and cyclists, and disability vehicles. Private vehicles including taxis, hire cars, and motorbikes are prohibited. The report states that a high-quality bike link between the bridge and the station is imperative to encourage multimodal trips, and there is expected to be a high demand for secure bike parking at Rhodes station. The GTA report does not forecast bike or pedestrian flows or bike parking demand.

⁵ Rhodes Station Precinct Proposed Uplift Traffic Study, Draft, GTA for Billbergia Group, 2/2/2014; Updated GTA report of 28 May 2014.

⁶ GTA Final Report 28/5/14, GTA DRAFT Report 3/2/14

⁷ Rhodes Station Precinct Transport and Public Domain, Henson Consulting, 5/9/14

⁸ GTA, 17 June 2014

2.7 Proposed Metropolitan Parking Policy Strategy

Consultation with TfNSW indicates that the development of the proposed MPP is in abeyance, and that local council parking strategies will continue to influence parking.

2.8 Implications of Rail and associated parking policy

There is no major Park-and Ride facility proposed for Rhodes. The only major car park in the station precinct is the off-street retail and recreational car parking in the new development accessed primarily off Gauthorpe Street. This is appropriate given Rhodes status as a major Destination Station for employment, and the objectives of public transport oriented development. On-street parking will include car share spaces.

2.9 North Sydney Freight Corridor

The Northern Sydney Freight Corridor (NSFC) program is a joint Australian and NSW Government initiative to improve capacity and reliability for passenger and freight trains between Sydney and Newcastle. There are no freight changes at Rhodes, but passenger train customers will benefit directly from the NSFC program investment. New station facilities, including lifts, have been built at Concord West and at Cheltenham. The program provides overtaking tracks that improve reliability for freight and passenger trains.

2.10 Buses and Unsworth Report

Bus interaction with rail at Rhodes is currently relatively minor, but has improved with the opening of Homebush Bay Bridge bus services. Regional services are forecast to grow, including the Strategic Bus Corridor from Burwood to Macquarie.

2.11 Jacobs Report 2016 and Council letter.

Canada Bay Council commissioned a study by Jacobs in 2016 and expressed concerns in a letter regarding aspects of the proposed station precinct development, including traffic impacts, and the developer revised the proposed development to address Council's concerns. An assessment and Addendum #1 was prepared in December 2016 to reflect a revised development proposal on the subject site.

These key issues identified by Council are noted. However, these issues do not preclude reasonable new development in Sydney in general, or the subject site. These nominal transport capacities are subject to increases from improvements in the technology, the road network, the public transport network, and overall social behavior changes in the use of transport. A more detailed response is provided under the heading in the following Jacobs Study.

2.11.1 Jacobs Study

Council commissioned a transport study and report by Jacobs⁹ in late 2016. The report considered both the Billbergia and iProsperity proposals together, including the Oulton Street site. The following sections shows the key findings of the Jacobs study extracted *in italics* and selected comments from this Addendum study:

2.11.2 Issue 1

The GTA traffic report indicates that the train services at Rhodes are already at capacity, and they have referenced 2011 journey to work numbers, which will have increased in the last 5 years due to more high density residential apartments being built in Rhodes West, potentially under-estimating trips by rail.

The GTA traffic report also suggests that a future proposed ferry wharf at Rhodes could accommodate 300 additional trips from the development that would be unable to be catered for on the rail network. The suggestion that additional ferry services would relieve this demand seems unrealistic given the capacity, service frequencies and destinations of the Parramatta River ferries.

Comment: The NSW Government policy is to encourage the use of public transport. The NSW public transport services including rail and bus will be upgraded over time to accommodate growth in the Sydney region, including Rhodes.

2.11.3 Issue 2.

The total number of trips generated by the development is not given in the Rhodes Station Precinct Proposed Uplift Traffic Assessment Report by GTA Consulting (dated 25 August 2016), instead the report has provided a difference in traffic generation from the approved PP1 to proposed PP2.

Comment: Noted.

2.11.4 Issue 3

The developer has only provided the proposed number of parking spaces for residential, retail and recreational facilities (2,214 spaces). No parking provision has been proposed for Hotel and Registered Club.

Comment: Noted

2.11.5 Issue 4

In order to reduce the trips from the future developments and minimise the impacts of additional car trips on the surrounding road network, it is suggested that Council review the Rhodes West parking rates.

⁹ Rhodes Station Precinct Traffic and Transport Review, Jacobs for Canada Bay Council, Final Report, 6 December 2016

Comment: The Rhodes West parking rates were set some years ago. At that time, the rates were considered quite restrictive and part of a bold and progressive parking limitation policy initiative by Council. Rhodes West has since developed and matured to be a sophisticated dense suburb, where residents and businesses have demonstrated less car use than in the past. This changing social attitude may support a further Council Review of parking rates.

2.11.6 Issue 5

The modelling results of the Rider Boulevard / Mary Street intersection under the PP2 development scenario are not consistent with the results of the modelling undertaken by Jacobs. Refer to Section 3.3 for Jacobs modelling results. The future traffic volume inputs in the models appear low as these do not reflect the trips generated from the Billbergia and other future developments (including Rhodes East) in the area. The cumulative impact of traffic generated by all developments in the station precinct indicates that this development will significantly impact the already congested local and state road network.

Comment: Noted.

2.11.7 Issue 6

The intersections modelled as part of the assessment submission examined the affected intersections in isolation. The Mary Street / Rider Boulevard and Mary Street / Marquet Street intersections are closely spaced intersections with less than 60 metres between them and the operational efficiency of these intersections would influence one another. In this case, the isolated intersection analysis approach undertaken would not show the actual operational efficiency and would likely underestimate future delays.

Additionally, an assessment of the Gauthorpe Street / Marquet and Mary Street / Marquet Street intersections in the vicinity of the Station Street Precinct were not provided in the traffic report.

To the north of the development site, with the additional development traffic, the queue on the western approach on the Walker Street / Leeds Street / Blaxland Road intersection would likely to increase due to the constrained right turn storage capacity under the rail line and would block the through traffic movements. This intersection would require widening of the railway underpass with additional traffic lane capacity.

Furthermore, an upgrade of the Averill Street / Concord Road intersection may also be required to cater for the additional development traffic from both the station precinct and Rhodes East.

Comment: Noted.

2.11.8 Issue 7

The proposed residential access driveway from Marquet Street is located next to the IProsperity development driveway. Located adjacent to each other, the wide driveway access could be a potential safety issue for pedestrians due to a high number of entering/existing vehicles and long crossing distances for pedestrians. The Walker Street loading dock access driveway could also impact on pedestrian safety due to vehicles entering /existing onto a road with high pedestrian activity. The Council DCP recommends vehicular access provision from rear or side lanes or secondary streets wherever possible. As such, Walker Street is not a suitable location for loading dock / residential driveways as it performs a major distribution function within Rhodes West. Therefore, these access locations on other streets e.g. Marquet Street or Gauthorpe Street should be considered.

Comment: Noted. Driveway access to the Subject Development is wholly on Marquet Street, and is considered acceptable. Some design development may be warranted to coordinate car and truck access to adjacent sites in order to minimize disruption to pedestrians and traffic.

2.11.9 Issue 8

A concept of reversing the priority at the Rider Boulevard / Mary Street intersection (currently a stop sign for Rider Boulevard) would result in long queues on both the east and west approaches of Mary Street. Installation of the roundabout at this location is considered unsuitable as it would change the priority of Walker Street. It would also be a safety issue for pedestrians as roundabouts are not suitable crossing points in high pedestrian environments.

Comment: Noted. The final decision on this matter is up to Council.

2.11.10 Issue 9

The morning peak modelling results of the Mary Street / Rider Boulevard intersection indicate that the intersection operates at LoS E, with 60 seconds delay and a 150 metre queue on Rider Boulevard. The results outlined in the GTA Station Precinct report indicates that the intersection performs with LoS B and results in 16 seconds delays and a 20 metre queue on Rider Boulevard, which are inconsistent with our findings. The proponent has provided insufficient traffic generation and trip distribution data in their proposals to adequately demonstrate the local road network would perform satisfactorily under the future conditions. Overall, it is identified that the operational performance of the intersections, especially the Mary Street / Rider Boulevard intersection would deteriorate with the additional traffic from PP2 developments. However, the intersections would operate satisfactorily with the trips from the PP1 developments. Other intersections such as Averill Street / Concord Road and Leeds Street / Blaxland Road would be significantly impacted as a result of Rhodes East and the Station Precinct developments. Upgrading of these intersections with additional lane capacity / change of intersection controls would be required in order to achieve better operational performance.

Comment: Noted.

2.11.11 Issue 10

The trips from the IProsperity development are not consistent with Jacobs' estimated trips. Only evening trips are provided (106 trips) and retail

development trips have not been provided. However, when considering the cumulative trips from both Billbergia development, it will produce a total of 833 trips in the morning peak and 1,206 trips in the evening peak. The large number of trips generated by the new developments will significantly impact the already congested surrounding road network.

Comment: Jacobs estimated trips (sic vehicular trips) from the iProsperity development are considered inappropriately high in this location.

The proposed trip rates of 106 vehicle trips per hour are within the traffic generation budget envelope proposed by GTA for the subject site.

The proposed trip rates of 106 vehicles per hour are based on an extensive data base of recent surveys of parking and traffic generation, including nearby sites in Rhodes.

Evening trip rates were used for conformity with the GTA studies and reports. Further information is given in the following sections for the morning peak hour and evening peak hour for the revised subject development.

2.11.12 See previous Issue 7

The proposed residential access driveway from Marquet Street is located next to the IProsperity development driveway. Located adjacent to each other, the wide driveway access could be a potential safety issue for pedestrians due to a high number of entering/existing vehicles and long crossing distances for pedestrians. The Walker Street loading dock access driveway also could impact on pedestrian safety due to vehicles entering /existing on a road with high pedestrian activity. The Council DCP recommends vehicular access provision from rear or side lanes or secondary streets wherever possible. As such, Walker Street is not a suitable location for loading dock / residential driveways as it performs a major distribution function within Rhodes West. Council should clarify with the proponents the access provisions for the car parks and loading docks.

A total of approximately 400 car parking spaces have been proposed. The required spaces as per the RMS / DCP rates would be 492 spaces. The proponent's report states that the shortfall is acceptable and consistent with the Rhodes West DCP objective to improve transport mode share- more walking, cycling and public transport. The proponent's proposed reduction in parking provision is acceptable as it meets council's larger goal of reducing parking in the Rhodes West precincts and it would encourage less car use.

Comment: Noted.

2.12 GTA Billbergia Report 2016

GTA undertook a traffic study¹⁰ for adjacent sites for Billbergia in 2016. This was updated from the GTA 2014 report to include PP2 proposal updates with revised yields.

Development Type	Planning Proposal 1	Planning Proposal 2	Difference (+/-)	
Residential Apartments	794 dwellings	1,705 dwellings	+911 dwellings	
Retail	6,314m ²	8,325m ²	2,011m ²	
Commercial	5,156m ²	0m ²	-5,15óm²	
Leisure Centre	250 car spaces	300 car spaces	+50 car spaces	
Hotel	96 rooms	28 rooms	-68 rooms	
Registered Club	0m ²	4,000m ²	4,000m ²	

Table 3.1: Development Yield Comparison

Canada Bay City Council requested that the traffic study assess a number of transport management issues. Recommendations included the intersection of Rider Boulevard and Mary Street to have its priority reversed such that traffic on Rider Boulevard has priority over Mary Street, and the intersection of Gauthorpe Street and Walker Street to operate as a roundabout intersection

Overall, the report concluded that traffic impacts arising from the proposed development uplift would be satisfactory.

2.13 Rhodes East Traffic and Transport Report for DPE, Jacobs 2017

This report¹¹ identifies the transport initiatives recommended to support the rezoning proposal for Rhodes East, with the following extracts: Of the additional population proposed within the precinct, all residents are located within 800 metres of the Rhodes Station and the proposed ferry wharf (approximately 10 minutes walking distance) and within 400 metres of a bus route. If stringent maximum car parking controls are able to be enforced across the precinct, there is also the opportunity for accommodating additional density, particularly within 400 metres of Rhodes Station, where a reduced household size and zero car parking provisions may be applied. Future rail timetabling improvements will provide added support for this approach.

Table ES.1: Proposed numberof dwellings and population in2036 Character Area	Number of dwellings	Population (based on 2.3 people per dwelling)
Rhodes East Gateway	159	366
The High Point	962	2,212
Leeds Street Foreshore Precinct	1,355	3,117
Concord Road Corridor	478	1,100
Total	2,954	6,795

Figure 5: Dwellings from Jacobs, 2017

¹⁰ Rhodes Station Precinct Proposed Uplift Traffic Study; Traffic Assessment Report,Issue: D 25/08/16, Client: Billbergia Group, GTA Consultants NSW

¹¹ Rhodes East, Department of Planning and Environment, Traffic and Transport Report, Draft Report, 18 May 2017

Overall the existing Concord Road corridor is expected to operate near capacity with most intersections performing at Level of Service (LoS) D or worse. Additional traffic associated with background growth and development will result in a further deterioration in performance along the A3 corridor.

Based on these findings, proposed intersection improvements outlined in this report result in northbound and southbound travel times on the Concord Road / Church Street / Devlin Street corridor improving by 77 per cent and 55 per cent in the morning peak, and 56 per cent and 49 per cent in the evening peak, respectively in comparison to the "without mitigation" scenarios.

In Rhodes East, the proposed suggested improvements result in improved LoS and minor decreased delays and queue lengths at most intersections.

Continued growth in travel in and around Rhodes is anticipated regardless of the Rhodes East development. Therefore, in the wider area, the following intersections have been identified as requiring upgrading and improving;

- Delvin Street / Victoria Road.
- Church Street / Morrison Road.
- Church Street / Junction Road.
- Concord Road / Homebush Bay Drive.
- Homebush Bay Drive / Rider Boulevard.

Further investigations by Roads and Maritime Services (Roads and Maritime) into the detailed design and funding will be required regarding the above potential intersection upgrades, regardless of the outcome of the Rhodes East draft Precinct Plan.

With a congested road and rail network, it is likely that more rail services would also be required to stop at Rhodes Station. A high-level analysis of rail demand shows that an additional 1.1 southbound rail services would be required in the 2036 one-hour morning peak to meet demand resulting from the Rhodes East development.

The proposed future land use and transport network aims to support the forecast increase in travel demand as a result of the rezoning proposal for Rhodes East. Overall, there is expected to be an additional 1,535 person trips in the 2036 two-hour morning peak. The proposed transport network to support this additional demand includes the following:

- A street hierarchy that uses the movement and place framework. Concord Road will continue to be the key north-south movement corridor through the precinct for general traffic, freight and buses. Activated frontages in some parts of Mary Street, Blaxland Road and Leeds Street will become 'Places for People' (refer to Section 4.3.1).
- New and upgraded walking links have been identified where high pedestrian activity will be located and to provide new connections and improved permeability (refer to Section 5.2.1).

- Proposed strategic cycling links have been identified based on providing connectivity with regional cycling links and closing missing gaps in the network. These new cycling links improve connectivity through Rhodes to existing links to the north-east, north-west, west and south (refer to Section 5.2.2).
- Improved bus services capitalising on the new Bennelong Bridge, improving frequencies and span of hours of key routes, local bus network redesign and improving the quality of interchange at Rhodes Station (refer to Section 5.2.3).
- Improvements to ferry access as a result of new ferry wharf at Rhodes (refer to Section 5.2.3).
- Increased rail capacity through timetable adjustments, potential quadruplication of the Northern Line through Rhodes and north over the Parramatta River rail bridge, and the future influence of mass transit (either providing a new station and service at Rhodes or by alleviating congestion on the Northern Line) (refer to Section 5.2.3).

FIGURE 8 URBAN DESIGN PLAN Annonannannannannan Residential Mixed Use including potential primary school **Destination Retail** (with residential above) Pedestrian Link Pedestrian Bridge Potential Pedestrian Railway Overpass Location IIIII Land Bridge Site HOLLWAINE PARK Adaptive Ground Floor Priority RHODESSTATION (with residential above) Mixed Use Corner Corner Plaza RHODES WEST Public Open Space RHODES CORPORATE **River** Activation PARK Ferry Wharf (proposed) Land to be Rezoned CONCORD HOSPITAL

Figure 6: Rhodes East Structure Plan (Roberts Day, 2016.

Off-street parking rates and car parking controls can be used as a policy tool to manage travel demand and dependence on private vehicles. The approach to recommending parking rates for Rhodes has been based on accessibility to public transport services, with two categories proposed:

- Category 1: high accessibility locations these areas are classified as locations within 400 metres walking access of Rhodes Station. This also means the location is within close proximity to local services currently existing or planned within the station precinct. The proposed parking rates are the most restrictive.
- Category 2: medium accessibility locations these areas are outside 400 metres walking access to Rhodes Station. The proposed parking rates are not as restrictive as Category 1, but still at a level appropriately tailored to encourage public and active transport use and discourage unnecessary car trips.

Category	Residential (spaces per dwelling)		Other			
Resident Visitor		Visitor	Commercial	Retail	Cafes and restaurants	Industrial
1	0	0	One space per 150m ² GFA	One space per 100m ² GFA	One space for every 150m ² GFA or one space for every six seats (whichever is lesser)	One space per 150m ² GFA
2	0.5	0.1	One space per 100m ² GFA	One space per 70m ² GFA	One space for every 100m ² GFA or one space for every four seats (whichever is lesser)	One space per 120m ² GFA

Figure 7: Proposed maximum parking rates for Rhodes East

Table 5.1 : Proposed maximum parking rates by category and development

2.14 Rhodes East Property Market Appraisal and Economic Feasibility – Hill PDA report, 2017

The feasibility of developing the waterfront sites was assessed as very marginal. The high land costs are the main contributing factor to its difficulty. It was considered that all dwellings must have at least one car space as the market risks are too high with apartments or terraces without onsite parking.

Concord Road and Blaxland Road sites are more viable to redevelop largely due to the high apartment yields that can be achieved in built forms up to 15 storeys high. The Structure Plan proposes 5 new streets – three between Blaxland Road and Cavell Avenue and two east of Concord Road.

2.15 Rhodes East Priority Precinct

The Department of Planning and Environment, in collaboration with the City of Canada Bay Council, has prepared a draft Precinct Plan for the Rhodes East Priority Precinct Investigation Area, published September 2017. The draft Precinct Plan identifies the area between the railway line, Concord Road and the Parramatta River as suitable for accommodating housing growth, and outlines the rezoning proposal for Rhodes East.

4 Existing Conditions

4.1 Subject site

The subject site is occupied by 6 detached dwellings, including one formerly used as an automotive services business. The recent traffic generation of the subject site with five driveways was low, less than ten trips per peak hour.

Figure 8: Marquet Street from Mary Street, looking north (subject site on right/east corner).



4.2 Pedestrian and bike volumes

Rhodes railway station is now a modern pleasant public transport interchange. The CityRail Compendium for year 2012 showed that Rhodes in 2011-12 had joined at #40 on the list of forty busiest railway stations on the network with an approximately 3700 barrier counts in the 3.5 hour am weekday peak (06.00 to 09.30am, 1630 entries, 2080 exits), one of the select few stations outside the Sydney CBD that have more barrier exits than entrances i.e. it is a destination station for workers. A total barrier count of 10 500 passengers per 24-hour weekday in year 2012 was a fourfold increase from the 2360 passengers in year 2004, effectively over twenty percent growth in patronage every year.

Further data on existing flows is given in the GTA and Jacobs reports.

From the railway station, an 800-metre convenient commuter walk takes in most of the suburb of Rhodes. A 1.5 kilometre walk or cycle ride will cover the whole peninsula, much of Wentworth Point and Concord Hospital.



Figure 9: Marquet Street mid-bloc, looking north¹²

Figure 10: Intersection of Marquet Street looking west along Gauthorpe St.



Figure 11; Rider Boulevarde looking east along Mary Street



¹² June 2014 and later



Figure 12: Mary Street west of rider Boulevarde, looking north

4.1 Traffic speed and volume data

Data was provided by Council in previous studies and summarised in the following diagrams. In general terms, daily traffic was four thousand along the foreshore Shoreline Drive, less than two thousand on the mid road Marquet Street, and eight thousand along the railway Walker Street route.





¹³ Council data, 2014




¹⁴ Council data, 2014, 85th percentile is the speed not exceeded by 85percent of vehicles.

4.2 Buses and Trains

Bus #458 serves the west side of the station via Walker Street and Rider Boulevard, to Concorde Hospital, Burwood .and Ryde shops. These routes operate 2-3 services in the peak hours, and 2 services per hour off-peak.

Bus #M41 provides a cross-regional service from Hurstville, at high frequencies.

Bus #526 links Rhodes with Wentworth Point, Sydney Olympic Park, Strathfield and Burwood.

Bus #533 links Rhodes with Wentworth Point and Olympic Park and with Ryde, Macquarie Park, and Chatswood.

Rail Services from Rhodes railway station connect via Strathfield interchange to Sydney Central and CBD, Parramatta, the North Shore, Central Coast and The Hunter regions.

Taxi services are widely available off the A3 and taxis ranks at Rhodes Railway Station and Rhodes Shopping Centre.



Figure 15: Public transport Services

4.3 Traffic and Pedestrian Surveys

4.3.1 Mary St/Rider Boulevard and Walker Street/Gauthorpe Street

The survey results as below indicate some growth in the traffic volumes from the Existing GTA traffic volumes (GTA Figure 4.1) towards the expected future traffic volumes with approved development (GTA Figure 4.20) as might be expected with continued new development in Rhodes. There was considerable pedestrian activity at the Mary Street intersection, reflecting the existing demand and perceived pedestrian safety hazard.

Figure 16: Survey intersection of Mary St/Rider Boulevard and Walker Street/Gauthorpe Street







4.3.2 Marquet Street north of Mary Street

The survey data indicates that daily traffic flows 7 day AADT on Marquet Street have increased since previous counts in 2013 to 2200 southbound and 2200 northbound in 2016, reflecting the ongoing new development in Rhodes. There are relatively few trucks and traffic speeds are modest and in line with Councils desire for a 40km/h speed zone. These traffic counts will be updated by counts in 2018 in the DA report.

Figure 17: Traffic on Marquet Street, 40m north of Mary Street, combined directions.



Vehicle classification¹⁵

Class 1	97%
Class 2	0%
Class 3	2%
Class 4	0%
Class 5	0%
Class 6	0%
Class 7	0%
Class 8	0%
Class 9	0%
Class 10	0%
Class 11	0%
Class 12	0%
Class 13	0%

Job No N2360

Client	Henson Consulting					
Road	Marquet St - 40m north o	f Mary St	Average Weekday			
Location	Rhodes		7 Day Average			
Site No.	1					
Start Date	5-May-16					
Description	Volume Summary	1. Marquet St - 40m north of M	lary St			
Direction	SB					

			Da	ay of We	ek				
	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Ave	7 Day
Time	9-May	10-May	11-May	5-May	6-May	7-May	8-May	W'day	Ave
AM Peak	218	202	210	200	185	193	177		
PM Peak	154	158	156	161	182	181	192		
0:00	20	14	17	16	12	36	28	16	20
1:00	11	8	10	9	18	19	27	11	14
2:00	10	5	8	6	8	9	23	7	10
3:00	7	7	7	7	9	14	9	7	9
4:00	10	11	11	11	8	11	11	10	10
5:00	30	34	32	32	25	19	7	31	26
6:00	61	64	63	55	53	52	18	59	52
7:00	130	140	135	133	138	68	41	135	112
8:00	218	202	210	200	185	107	87	203	173
9:00	152	143	148	128	144	167	142	143	146
10:00	109	121	115	105	121	193	156	114	131
11:00	118	115	117	109	122	192	177	116	136
12:00	136	110	123	133	141	181	171	129	142
13:00	115	112	114	110	117	160	152	114	126
14:00	140	132	136	124	115	160	126	129	133
15:00	113	121	117	128	113	152	137	118	126
16:00	131	124	128	117	129	141	154	126	132
17:00	138	150	144	161	175	160	153	153	154
18:00	154	158	156	161	169	151	192	159	163
19:00	119	122	120	124	182	171	112	133	136
20:00	101	100	100	98	107	101	114	101	103
21:00	73	89	81	101	85	92	83	86	86
22:00	41	47	44	57	75	72	54	53	56
23:00	21	37	29	38	46	45	31	34	35
Total	2158	2164	2161	2162	2297	2473	2205	2188	2231

2,188 2,231

▼

¹⁵ Austroads: Class 1: light vehicle with 2 axles; Class 3: 2 axle truck or bus

Job No	N2360											
Client	Henson Consulting											
Road	Marquet St - 40m north of Mary St Average Weekday 2,118											
Location	Rhodes 7 Day Average 2,201											
Site No.	1											
Start Date	5-May-16		1.14-			law. Ch			_			
Description	Volume Summary 1. Marquet St - 40m north of Mary St											
Direction	NB											
				ay of We								
	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Ave	7 Day			
Time	9-May	10-May	11-May	5-May	6-May	7-May	8-May	W'day	Ave			
AM Peak	99	110	103	99	122	156	118					
PM Peak	240	251	246	262	262	222	222					
0:00	9	30	20	25	27	51	37	22	28			
1:00	7	16	12	14	17	28	23	13	17			
2:00	10	6	8	7	8	14	17	8	10			
3:00	3	2	3	2	12	11	10	4	6			
4:00	3	5	4	5	2	13	8	4	6			
5:00	17	14	16	11	15	23	3	15	14			
6:00	54	54	54	55	52	26	6	54	43			
7:00	89	65	77	88	72	47	29	78	67			
8:00	96	110	103	99	107	75	38	103	90			
9:00	99	54	77	90	122	98	91	88	90			
10:00	87	98	93	82	95	149	110	91	102			
11:00	91	80	86	97	121	156	118	95	107			
12:00	133	96	115	113	117	174	159	115	130			
13:00	87	71	79	96	98	157	144	86	105			
14:00	116	112	114	107	106	145	158	111	122			
15:00	122	102	112	120	137	153	173	119	131			
16:00	125	136	131	147	150	185	177	138	150			
17:00	193	201	197	208	217	198	193	203	201			
18:00	240	251	246	262	262	222	222	252	244			
19:00	158	155	156	151	223	189	114	169	164			
20:00	124	141	133	158	172	160	142	146	147			
21:00	88	10	49	166	152	153	130	93	107			
22:00	80	21	51	95	104	84	84	70	74			
23:00	36	10	23	58	90	70	50	43	48			
Total	2067	1839	1953	2255	2478	2581	2236	2118	2201			

Northbound speed

Sp	Speed									
Ave	85%ile									
34.7	41.1									



Southbound speed

Speed									
Ave	85%ile								
35.7	42.5								



4.3.3 Number 7 Rider Boulevarde, Rhodes,

A comparable building use in a comparable location from the railway station on the east side of Rider Boulevard immediately south of Mary Street was surveyed. The Pinnacle Apartments are located on a prominent site close to the station and facilities, and offer a mix of one, two and three bedroom apartments along with penthouses. The building has approximately 233 residential units, approximately 2000m2 commercial/retail floorspace, and basement car parking and a loading dock based on data¹⁶ and site inspection and a list of the business names¹⁷,

Figure 18: Driveway to 7 Rider Boulevard



¹⁶ Westpac schedule of acceptable properties, 24 storey 233 residential units.

¹⁷ Chambers Fine Coffee – Café and Coffee Shop; Innis 9 – Hair Salon; The Old Fellow – Chinese Restaurant;1606 Luis De Torres – Breakfast and Brunch restaurant; Dainty Dumpling House - Restaurant; Bei Wan Taiwan Cuisine - Restaurant; Chidzuru – Restaurant; Lid Jar - restaurant; Peking Restaurant; Orange Supermarket

Figure 19: Traffic generation of 7 Rider Ave



Ap	proa	ach	Car Park Entrance										
Di	recti	on		0	UT			I	N		P	edestria	ns
Tim	e Pe	riod	Cars	Trucks	Buses	Total	Cars	Trucks	Buses	Total	NB	SB	Total
7:00	to	7:15	2	0	0	2	4	1	0	5	17	28	45
7:15	to	7:30	4	1	0	5	1	0	0	1	21	50	71
7:30	to	7:45	6	0	0	6	1	1	0	2	26	64	90
7:45	to	8:00	4	1	0	5	2	2	0	4	33	44	77
8:00	to	8:15	4	1	0	5	0	0	0	0	52	117	169
8:15	to	8:30	9	0	0	9	1	1	0	2	42	80	122
8:30	to	8:45	10	0	0	10	1	0	0	1	20	155	175
8:45	to	9:00	8	1	0	9	5	0	0	5	19	119	138
AN	/I Tot	als	47	4	0	51	15	5	0	20	230	657	887
16:00	to	16:15	3	2	0	5	7	0	0	7	83	80	163
16:15	to	16:30	5	0	0	5	4	0	0	4	71	58	129
16:30	to	16:45	4	0	0	4	3	0	0	3	114	82	196
16:45	to	17:00	4	0	0	4	3	0	0	3	121	56	177
17:00	to	17:15	2	0	0	2	2	0	0	2	186	61	247
17:15	to	17:30	0	0	0	0	3	0	0	3	119	66	185
17:30	to	17:45	5	0	0	5	3	0	0	3	127	48	175
17:45	to	18:00	8	0	0	8	10	0	0	10	83	66	149
PN	/ Tot	als	31	2	0	33	35	0	0	35	904 517		1,421



Job No.	: N2360
Client	: Henson Consulting
Suburb	: Rhodes
Location	: 3. Rider Blvd / Car Park Entrance (Eastern Side)
Day/Date	: Thu, 5th May 2016
Weather	: Fine
Description	: Mid-block Count
	: Hourly Summary



Ap	proa	ich	Car Park Entrance											
Di	recti	on		0	UT			I	N		Pedestrians			
Tim	Time Period			Trucks	Buses	Total	Cars	Trucks	Buses	Total	NB	SB	Total	
7:00	to	8:00	16	2	0	18	8	4	0	12	97	186	283	
7:15	to	8:15	18	3	0	21	4	3	0	7	132	275	407	
7:30	to	8:30	23	2	0	25	4	4	0	8	153	305	458	
7:45	to	8:45	27	2	0	29	4	3	0	7	147	396	543	
8:00	to	9:00	31	2	0	33	7	1	0	8	133	471	604	
AN	/ Tot	als	47	4	0	51	15	5	0	20	230	657	887	
16:00	to	17:00	16	2	0	18	17	0	0	17	389	276	665	
16:15	to	17:15	15	0	0	15	12	0	0	12	492	257	749	
16:30	to	17:30	10	0	0	10	11	0	0	11	540	265	805	
16:45	to	17:45	11	0	0	11	11	0	0	11	553	231	784	
17:00	to	18:00	15	0	0	15	18	0	0	18	515	241	756	
PN	/I Tot	als	31	2	0	33	35	0	0	35	904	517	1,421	





Ар	proa	ach			c	ar Park	Entrand	e						
Di	recti	on		0	UT		IN				Pedestrians			
Tim	e Pe	riod	Cars	Trucks	Buses	Total	Cars	Trucks	Buses	Total	NB	SB	Total	
7:00	to	7:15	3	0	0	3	1	0	0	1	6	3	9	
7:15	to	7:30	5	0	0	5	0	0	0	0	3	10	13	
7:30	to	7:45	1	0	0	1	1	0	0	1	9	9	18	
7:45	to	8:00	2	0	0	2	2	0	0	2	9	28	37	
8:00	to	8:15	2	0	0	2	0	0	0	0	17	13	30	
8:15	to	8:30	8	0	0	8	1	0	0	1	6	30	36	
8:30	to	8:45	2	0	0	2	2	0	0	2	16	9	25	
8:45	to	9:00	2	0	0	2	3	0	0	3	9	41	50	
AN	/I Tot	als	25	0	0	25	10	0	0	10	75	143	218	
16:00	to	16:15	1	0	0	1	5	0	0	5	56	69	125	
16:15	to	16:30	2	0	0	2	3	0	0	3	59	40	99	
16:30	to	16:45	2	0	0	2	9	0	0	9	63	73	136	
16:45	to	17:00	2	0	0	2	4	0	0	4	58	54	112	
17:00	to	17:15	1	0	0	1	3	0	0	3	66	33	99	
17:15	to	17:30	2	0	0	2	3	0	0	3	38	69	107	
17:30	to	17:45	6	0	0	6	4	0	0	4	51	38	89	
17:45	to	18:00	6	0	0	6	6	1	0	7	68	60	128	
PN	1 Tot	als	22	0	0	22	37	1	0	38	459	436	895	

Job No.	: N2360
Client	: Henson Consulting
Suburb	: Rhodes
Location	: 3. Rider Blvd / Car Park Entrance (Eastern Side)
Day/Date	: Sat, 7th May 2016
Weather	: Fine
Description	: Mid-block Count

: Hourly Summary



Ap	proa	ach	Car Park Entrance												
Di	Direction			0	UT		IN				Pedestrians				
Time Period			Cars	Trucks	Buses	Total	Cars	Trucks	Buses	Total	NB	SB	Total		
7:00	to	8:00	11	0	0	11	4	0	0	4	27	50	77		
7:15	to	8:15	10	0	0	10	3	0	0	3	38	60	98		
7:30	to	8:30	13	0	0	13	4	0	0	4	41	80	121		
7:45	to	8:45	14	0	0	14	5	0	0	5	48	80	128		
8:00	to	9:00	14	0	0	14	6	0	0	6	48	93	141		
AP	/I Tot	als	25	0	0	25	10	0	0	10	75	143	218		
16:00	to	17:00	7	0	0	7	21	0	0	21	236	236	472		
16:15	to	17:15	7	0	0	7	19	0	0	19	246	200	446		
16:30	to	17:30	7	0	0	7	19	0	0	19	225	229	454		
16:45	to	17:45	11	0	0	11	14	0	0	14	213	194	407		
17:00	to	18:00	15	0	0	15	16	1	0	17	223	200	423		
PN	/I Tot	als	22	0	0	22	37	1	0	38	459	436	895		

4.4 Current Parking Supply, Controls, Pricing and Usage

Current on-street parking is time limited for the block west to and including Marquet Street (4P), and Mary Street (2P and Loading Zone) and east in the immediate vicinity of the railway station, excluding the unlimited parking along the rail line boundary: this parking is occupied from very early in the morning, with a proportion of what appears to be permanent parking. Parking demand and usage is high, and estimated over 95% occupied on weekdays after about 8am. Observed occupancy of these bays was slightly higher in the morning, but ranged between 80% and 98% occupied throughout the day, indicative of a suppressed demand for car parking. There is also some car share parking in Rhodes Shopping Centre.

4.5 Current and proposed road works and traffic management works and bike paths

Homebush Bay Bridge was opened on 22 May 2016. M4 motorway widening, intersection, and ramp management improvement works are complete and M4 Smart Motorway projects are due for completion in 2020. West Connex stages 1 and 2 are planned to be opened by 2023. Discussions with Council and RMS officers did not indicate any other major proposed immediate transport network works.

4.6 Heavy Vehicles flows and percentages

Heavy vehicle percentages within Rhodes are not unusually high.

4.7 Road Safety

RMS records¹⁸ and the Figure below indicate that there is no unusual concentration of crashes around the subject site.

Figure 20: Rhodes Peninsula Traffic Crashes, 2008-2013¹⁹



¹⁸ Crashstats 2010

¹⁹ Data provided by Council

4.8 Short term pick-up and set-down

Short term pick-up and set-down space is available both sides of the railway station, but is not substantial or formalised.

4.9 Off- Street car parking

All the recent major residential, commercial, and retail development in Rhodes include off-street car parking in accordance with authority's requirements.

4.10 Demographics and Mode Split

The 2011 Census showed the suburb of Rhodes had 15% of households with no registered motor vehicles, 50% higher than the NSW average, and a much lower proportion than NSW average for 2,3 or more cars per household. In Rhodes (State Suburb), 76.3% of people were not born in Australia, and arguably may have a migrant and cultural background open to less travel by private car.

Travel to Work employed persons aged 15 years and over	Rhodes	Rhodes %	NSW %	Australia %	Canada Bay LGA% 2006 ²⁰
Car as driver	1155	40.7	57.6	60.2	58.7
Train	955	33.7	6.2	3.9	9.7
Walked only	149	5.3	4.1	3.7	2.7
Car as passenger	99	3.5	5.0	5.3	*incl. as driver
Train, Bus, Ferry	60	2.1	1.4	0.8	11.7
Bicycle					0.7
People who travelled to work by public transport	1103	38.9	13.8	10.4	
People who travelled to work by car as driver or passenger	1255	44.3	62.8	65.5	

Figure 21: Mode Split: Travel to Work (ABS Census 2011, Rhodes – State Suburb)

²⁰ Local Planning Strategy 2010

5 Future Development

5.1 Former Proposed Development

The former development proposal for the Subject Site can be summarised as a site area of approximately 2 902m2 developed as a high-rise building including:

- 399 residential apartments (16 studio units, 111 one-bedroom, 192 twobedroom, 80 three-bedroom)
- Commercial premises totaling 3 861m2GFA
- Basement car park with 400- 491 car spaces, bicycle and motorcycle parking, car share spaces and loading dock.
- One driveway on the northern boundary of the site to Marquet Street
- Landscaping and ancillary works
- Perimeter footpaths and site pedestrian links.

5.2 Current Subject Development

The current proposal (Koichi Takada Architects drawings DA Series A000) can be summarised as a site area of approximately 2 902m2 developed as a high-rise building including:

- 330 residential apartments
- Retail premises totaling 2 304m2 GFA
- Commercial premises including child care centre totaling 2 928m2m2GFA
- Basement car park with about 400 car spaces, bicycle and motorcycle parking, car share spaces
- Loading dock to accommodate one 8.8m Medium Rigid Vehicle (MRV) and one Small Rigid Vehicle (SRV).
- One driveway on the northern boundary of the subject site to Marquet Street, with a pedestrian refuge on the footpath before the next driveway to the north, to serve the basement car park and the loading dock.
- Landscaping and ancillary works
- Perimeter footpaths and site pedestrian links.

5.3 Future development

The Billbergia proposals in the station precinct are described, as they are known in previous sections of this report.

The Rhodes East area to the east of the railway also has development potential: rezoning of the area to the north of Mary Street from existing low density residential to higher densities, plus potential redevelopment of the business park area to the south of Mary Street at higher floor space ratios and density.

Increased numbers of residents and workers are forecast in the surrounding areas, including Wentworth Point, Sydney Olympic Park, and the Canada Bay Local Government Area.

5.4 Network capacity and effects

Key future transport network effects include:

- Wentworth Point development, including the Wentworth Point Primary School and a possible future bridge over the Parramatta River to Melrose Park.
- Further development and road upgrades including the A3 route east of the railway.
- Additional bus and ferry services
- Improvement of the crossings of the railway, including Walker Street -Leeds Street underpass of the railway, additional pedestrian crossings of the railway shown in the DCP, and possible Gauthorpe Street extension
- Possible extension of the proposed Parramatta-Olympic Park-Strathfield Light Rail to Rhodes.
- West Metro from Sydney to Parramatta may include a station to intercept the T1 Northern Line, to be located at either North Strathfield station or Concord West station.

5.5 Target mode split

The target mode split might be considered as the above 2011 Census of 44.3% by car plus Councils LGA-wide aim to reduce private car by 10 percent, to reduce this to 40%. This accords with the recent studies for Rhodes East:

Table 4.2 : Mode share targets for Rhodes East Mode	Existing mode share	Rhodes East target mode share
Private vehicle	65%	40%
Rail	17%	20%
Bus	2%	5%
Walk only	13%	30%
Others (includes cycling)	3%	5%

Figure 22: Mode Share Targets for Rhodes East by Jacobs 2017

5.6 Future Parking Policy

It is likely that any future parking policy will retain or strengthen off-street and on-street parking rates, charges, and restrictions.

5.7 Best Practice to Address Trends in Increased Urban Growth and Density

The DCP emphasises managing the transport demand that is generated by a development to encourage more sustainable transport options. 'Managing Transport Demand' refers to the measures taken which minimise the need to travel and the length of trips, particularly by cars, and encourages travel by more sustainable modes of transport (DIPNR, Integrating Land Use and Transport, 2001).

The proposed subject development will provide:

• **Reduced Car Parking** rates per residential unit

- Location appropriately close to convenient pedestrian paths, signalised crossings, bus stops, railway station, bike routes that link conveniently to local and regional shopping and dining, employment, schools and universities, and open space and recreation. This convenience will encourage maximum use of transport other than private cars. Many residents are likely to often use these modes in preference their private cars, and therefore reduce the peak hour traffic generation.
- **Car Share scheme** for car share spaces on the perimeter kerbside and in the basement
- **Bike parking** in the basement and at grade
- **Bike Shop and Bike Repair Workshop** proposed as part of the retail component
- **Green Transport Plan** to encourage car-pooling and other sustainability initiatives such as preferential visitor parking for electric or hybrid cars
- Transport Access Guide (TAG) to encourage non-car modes of transport
- **Remote Car Parking** rented in surrounding car parks, with reciprocal use such as overnight visitor parking in the Rhodes retail centre car parks
- **Dedicated Mini Bus** might be trialled in conjunction with others to circulate residents and guests within the Rhodes area that could also provide free community transport at times. This could be modelled on community mini buses in other areas of Sydney such as the Parramatta Clipper or the Manly Hop-Skip-and-Jump bus. The viability of such a service in the longer term would be determined by competition for the other good public transport in Rhodes.

5.8 Design vehicles

The design vehicle for car parking is the Australian Standards AS2890.1 Off Street Car Parking B99 vehicle (99th percentile vehicle represented by a very large car or Ford Transit Van medium wheelbase van) to public parking. The design vehicle to service waste using a private contractor is also likely to be the AS2890.2 Medium Rigid Vehicle MRV 8.8m long with headroom of 3.6- 4.3m.

5.9 Sight distance of driveway

The proposed design driveway is well located back from the Mary Street intersection, in accordance with DCP guidelines. Desirable minimum sight distances can be provided at the driveway. The proposed driveway is next to the proposed Billbergia residential driveway, and will include a pedestrian refuge between the driveways. The proposed driveway will be wide enough to accommodate trucks to the loading dock.

5.10 Service Vehicle access and analysis of projected queuing at entrances

Waste collection will be located on-site including truck access to the commercial and residential waste and recycling spaces. Sufficient parking and traffic management elements will avoid queuing at the entrance.

6 Evaluation

6.1 Methodology

The transport assessment and report and this Addendum addresses the traffic generation and transport impacts, and is not directly related to floor space ratio or building heights.

This evaluation is based primarily on the accepted methodology of the GTA study, which established a traffic budget including the site referred to as the Hoffa site, 3-9 Marquet Street and 4 Mary Street, which forms part of the subject site of 1-9 Marquet Street and 4 Mary Street. GTA section 2.2 states that the Approved Development to be completed includes the Hoffa development in Precinct D: "The site is expected to provide some 150 residential apartments plus 1200 m2 retail floor area".

6.2 Traffic Generation

Traffic generation rates adopted for the previous 2001 and 2009 Masson Wilson Twiney traffic assessments for Rhodes were residential use of 0.29 trips per peak hour per residential unit, 4.0 trips per evening peak hour per 100m2 Net Leasable Area of retail use and 1.5 trips per 100m2 of NLA of commercial use.

In 2013, RMS released a Technical Direction TDT 2013/04a providing a summary of trip generation rates for various land uses to replace their suggested trip rates in their Guide to Traffic Generating Developments 2002. The rates RMS stated must be followed for the critical p.m. weekday peak were: residential use of 0.15 trips per peak hour per residential unit, and 1.2 trips per 100m2 of NLA of commercial use, both a significant reduction from the previous applied rates.

GTA noted that traffic generation at two existing buildings in Rhodes were conducted on Tuesday 17 September 2013, the Voyager South and VQ developments, and indicated a 0.17 vehicle trips per p.m. peak hour, similar to the RMS TDC rates.

Henson Consulting conducted surveys at the nearby Pinnacle building at 7 Rider Boulevard in Rhodes in May 2016 that showed weekday pm traffic generation rates of 0.15 vehicle trips per residential unit, even including significant retail and commercial users in that building, as presented in the surveys chapter above and summarised in following table.

Maximum hour traffic	Traffic generated at 7 Rider Boulevard veh/h	Traffic Generation Rate at 7 Rider Boulevard veh/h/unit	High Density Residential Flat Buildings RTA TDC 2013/04a veh/h/unit	Office Blocks - Commercial RTA TDC 2013/04a Veh/h/100m2 GFA
08.00-09.00a.m.	41	0.18	0.19	1.6
16.00-17.00p.m.	35	0.15	0.15	1.2

Figure 23: Traffic Generation Rates

As noted in the GTA Final Report, those rates applied by GTA in 2013 and 2016 are generally consistent with the revised RMS generation rates, in that traffic generation rates per dwelling have reduced significantly from the previous rates contained in the RMS 2002 guidelines and previously applied by MWT.

The proposed schedule ²¹.of proposed floor space, traffic generation²², and parking²³ for the subject site is shown in the Appendix to this report.

The original Hossa site scheme included residential and retail, but its estimated traffic generation was higher because of the higher rates prevailing then. That traffic generation envelope or traffic budget is therefore established, and was used in the GTA reports for the station precinct. Applying the site area ratio of the subject site of 4 Mary Street and 1-9 Marquet Street of 2902m2 over the Hossa site area of 4 Mary Street and 3-9 Marquet Street of 2547m2²⁴ gives a traffic budget of about 118 vehicles per hour in the weekday evening peak.

The proposed 1000m2 supermarket is not really a full-service supermarket in competition to nearby Coles or Woolworths of over 3000m2 - it is envisaged as a specialty supermarket focused on Chinese or Korean or similar specialties. Retail and Commercial operations are the same as is envisaged for East Rhodes, and this study therefore applies East Rhodes rates of parking for commercial and retail land uses.

The resulting traffic generation of 110veh/h is less than the assumed for the Hoffa Scheme and GTA analysis in the critical evening peak, and therefore fits within the allowable traffic budget of 118vehicles per hour. The subject site proposal weekday morning weekday traffic generation of 135v/h is similar.

Bicycles:

min 2 spaces for clientele

²¹ Email from I-Prosperity

²² Traffic Generation:

²³ Parking rates based on Rhodes West DCP 2015:

Residential All dwelling types max 1 space per dwelling (average) with accessible parking spaces allocated to each adaptable unit *Visitors* max 1 space per 20 apartments

Service vehicles max 1 space per 50 apartments for first 200 apartments plus 1 **Commercial** Commercial offices max 1 space per 40m₂ Gross Floor Area

Service vehicles 1 space per 4,000m₂ GFA for first 20,000m₂ GFA and a space per

^{8,000}m2 GFA thereafter

Retail 1 space per 40m₂ Gross Floor Area

Service vehicles 1 space per $500m_2$ for first 2,000m₂ and 1 space per 1,000m₂

thereafter (50% of spaces for trucks)

Residential Residential min 1 space per 3 apartments

Visitors min 1 space per 12 apartments Commercial Employee min 1 space per 200m2 GFA

Retail Visitor min 1 space per 750m2 GFA

Retail complex / shops min 1 space per 300m2 sales floor for employees

min 1 space per 1,000m2 sales floor area for shoppers

Cafes min 1 space per 25m2 public area for employees

Motorcycle parking equivalent to the area of 1 car parking space per 100 parking spaces, is to be provided in every building with on-site parking. AS2890.1 shows 4.5 motorcycle spaces fit in one car space.

²⁴ Phase 1 Environmental Site Investigation, April 2015, Table 1, KPMG et al.

6.3 Parking

Application of the Rhodes West DCP 2105 parking rates suggests a **maximum** car parking supply of 501 car spaces. However, this level of car parking may generate traffic flows that would exceed the accepted traffic budgets, and would not be in accord with councils evolving policies in East Rhodes to further reduce car parking. A range of options were considered and other options are presented in the following table.

					1	
Car		car spaces per	car	car spaces	car spaces	Car
Spaces/		unit value	spaces	with	with	spaces
Option		(DCP 2015)	max-	commercial	commercial	Proposed
_			imum	parking	and retail	Option
				reduced to	parking	1
				Rhodes East	reduced to	
				rates	Rhodes East	
					rates	
Residential	330	max 1 per unit	330	276	328	293
	units	average				
Residential		max 1 per 20	17	17	17	17
visitors		units				
supermarket	1000m2	1 per	25	25	10	25
_		40m2GFA				
Specialty	1304m2	1 per 40m2	33	33	13	33
retail						
Commercial	2428m2	max 1 per	61	16	16	16
		40m2				
Child care	500m2	1/4 children	16	16	16	16
centre -		plus 1 per 2				
		staff				
Sub- total			482	383	400	400
Service		max	5	5	0^{25}	0
vehicles -		1/50unitsfor				
Residential		first 200 plus 1				
Service		1/4000m2GFA	9	9	0 ²⁶	0
Vehicles -						
Commercial						
Service		1 space per	5	327	0 ²⁸	0
Vehicles -		500m2 for first				
Retail		2,000m2 and 1				
		space per				
		1,000m2				
Total car			501	400	400	400
spaces						

Figure 24: Proposed Car Parking Options

²⁵ Shared with residential visitor spaces, plus one MRV and one SRV in loading dock

²⁶ Shared with residential visitor spaces, plus one MRV and one SRV in loading dock

²⁷ Plus one MRV and one SRV in loading dock

²⁸ Shared with residential visitor spaces, plus one MRV and one SRV in loading dock

Applying the parking rates proposed by Jacobs and the Rhodes East Priority Precinct Planning Report²⁹ to retail and commercial floor space on the subject site gives about 400 car spaces on the subject site.

If the rate of commercial and retail parking is changed to Rhodes West DCP 2015 rates and service vehicle parking is shared with visitor parking spaces, then some of the 400 total car parking spaces would change from residential use. In the Proposed Option, 37 residential units would be allocated zero car spaces.

Traffic generation would vary in peak activity patterns between these parking options, but would be broadly similar to the allowable traffic generation budget, and therefore be acceptable.

The location and allocation of the proposed on-site car parking within the basement levels would be subject to design development and marketing feasibility in the DA stage. Council may require some of residential bays and commercial bays to be set aside as Car Share bays, in addition to several car share bays that could be provided on-street along the subject site frontage.

The final supply and allocation of car parking would be considered in the DA stage of design development, and could include consideration of up to 40 residential units with no car parking, allocation of car share spaces to particular uses, accessible car spaces, and the acceptability of commercial and retail car parking rates similar to those proposed for Rhodes East.

A minimum of 165 bike parking spaces are proposed.

18 motorcycle parking spaces are proposed.

17 car spaces for service vehicles such as utilities and vans are included in the above total car parking supply.

The proposed loading dock will accommodate one MRV and one SRV.

The proposed parking is within the maximum car parking supply allowed in the DCP 2015, and is therefore supportive of the DCP objective to reduce car parking in Rhodes West and to encourage the use of public transport, walking and cycling.

6.4 Evaluation results

The traffic generation of the proposed subject development is within the traffic generation for the subject site (Hossa site) assumed by the GTA Final Report, and is therefore within the envelope of traffic generation and traffic effects from approved development and uplift considered acceptable by GTA and by Council.

The GTA report concludes: "From the above, our analysis indicates that the traffic arising from the proposed uplift would not result in noticeable adverse traffic impacts when compared with traffic conditions under the approved development." Further traffic engineering detail will be submitted with the DA application.

²⁹ Planning and Environment NSW September 2017

7 Conclusions

- This assessment notes and accepts the Council's key issues on Traffic and Transport.
- This assessment notes and responds to the issues raised in the Jacobs transport reports.
- The proposed development on the subject site will work within the existing transport constraints and associated "traffic budgets" established by the Stapleton and GTA and Jacobs reports and authority's approvals.
- The proposed development will provide best practice means of minimising peak traffic generation in accordance with Council and NSW Government policies.
- Council has long constrained car parking in Rhodes, and with changes in community travel preferences and better public transport, cycling and walking conditions, has resulted in increased use of public transport, walking, and cycling.
- Applying the parking rates proposed by Jacobs and the Rhodes East Priority Precinct Planning Report to retail and commercial floor space on the subject site gives about 400 car spaces on the subject site.
- If the rate of commercial and retail parking is changed to Rhodes West DCP 2015 rates and service vehicle parking is shared with visitor parking spaces, then some of the 400 total car parking spaces would change from residential use. In the Proposed Option, 37 residential units would be allocated zero car spaces.
- The subject development proposed parking supply, layout, servicing, circulation and access are appropriate and designed in accordance with the relevant Australian Standards.
- Proposed access points for pedestrians, cyclists, and vehicles are suitable and in accordance with road hierarchy considerations.
- The proposed operation can be appropriately managed and have no significant adverse impact on road amenity or road user safety.
- The proposed development will support NSW Government and Council targets to increase the transport mode share to the sustainable modes of public transport, walking, and cycling.

Forte

8

Appendix: Traffic Generation and Parking Schedule

Traffic and Parking Generation Summary	For : Forte	By: Henson Consulting		Proposed Sc	heme		20-Jun-18
Traffic Generation Budget, based on GTA and	lysis of Hossa site						
Development Type		2001-2009 traffic generation rates	2001-2009 traffic ge	2001-2009 Pr	2001-2009 Tr	i 2001-2009 Trin g	eneration
bereiopment Type		a.m. peak hour	p.m. peak hour	Hossa	a.m. peak	p.m. peak	
		rate/units	rate/units		veh/h	veh/h	
Residential Apartments	Veh trips per unit	0.29					
Retail	Ven trips per unu Veh trips per 100m2 NLA	0.29					
Commercial	Vehicle trips per 100m2 MEA	1.5	,				
Total	<u>veh/h</u>	1.5	1.5	0	74		
Hossa site Area in m2	2547						
Subject site area incl 1-9 Marquet St	2902						
Subject site budget based on site area ratio							
to Hossa site	1.1	site area ratio			84	118	
Parking - Car spaces							
		car spaces per unit value (DCP 2015)	spaces maximum	proposed car	spaces maxir	num	location:
Residential (1 accessible parking space to be							
provided per adaptable unit)	330 units	max 1 per unit average	330	312	could also in	clude car share	Basement 02-05
Residential visitors (incl accessible spaces)		max 1 per 20 units	17				nd retaiBasement 01
supermarket	1000m2	1 per 40m2GFA	25			odes East 1/100m2	
specialty retail	1304m2	1 per 40m2	33			odes East 1/100m2	
commercial	2428m2	max 1 per 40m2	61			odes East 1/150m2	Basement 02
childcare - 50 children @10.25m2, 6 staff	500m2	1/4 children plus 1 per 2 staff	16				Basement 01
Total			480	383			
Service Vehicle Spaces		(DCP2015)					
Service vehicles - Residential		max 1/50unitsfor first 200 plus 1	5				Lower Ground
Service Vehicles -Commercial		1/4000m2GFA	9			s in car spaces*	Basement 01
Service Vehicles -Retail		1 space per 500m2 for first 2,000m2 and 1 space	2 5	3	plus 50% truc	ks 1 MRV ,1 SRV	Lower Ground
Total			499	400			
Other Parking		(DCP 2015)					
Residential bikes		min 1 space per 3 apartments		110			
residential Visitors		min 1 space per 12 apartments		28		uded in commercia	
commercial employee		min 1 space per 200m2 GFA		- 15		uded in commercia	II
Retail visitor Retail complex / shops		min 1 space per 750m2 GFA min 1 space per 300m2 sales floor for employees	-	8			
Retail complex / shops		min 1 space per 1,000m2 sales floor area for sho		2			
		min 1 space per 1,000m2 sales noor area for sho	ppers				
motorcycles		1 (4.5 motorcyles) car space per 100 car spaces			bike spaces r motorcycle s		
motorcycles		1 (4.5 motorcyles) cal space per 100 cal spaces		10	motorcycle s	Jaces	
Adopted Traffic Generation Rates							
Development Type	Morning Peak Hour	Evening Peak Hour					
Residential Apartments		0.15 trips per peak hour per apartment			(GTA 2016)		
Retail - Specialty	0.51 trips per peak hour per car space	1.02 trips per peak hour per car space			(GTA 2010) (GTA 2016)		
Retail – Supermarket	1.85 trips per peak hour per car space	3.69 trips per peak hour per car space			(GTA 2010)		
Commercial	1.6 trips per peak hour per 100m2	1.2 trips per peak hour per 100m2			(GTA 2010)		
Childcare	1.0 trips per peak nour per 100m2		3		(GTA/HC stud	dies)	
Estimated Peak Hour Traffic Generation of I	Proposed Development (veh/h)						
Peak Periods	Area etc	in	out	two way			
Weekday morning							
Residential	330 units			63			
specialty retail	1304m2			7			
supermarket	1000m2			19			
commercial	2428m2			39			
childcare	500m2			8			
total				135			
Weekday evening							
Residential	330 units			50			
specialty retail	1304m2			13	if retail like Ea	ast Rhodes parking P	ates
supermarket	1000m2						I,East Rhodes park'g rates
commercial	2428m2			29			
childcare	500m2			8	Estimate from	other childcare cer	tres
total				110			

9 Appendix: Explanatory notes

Description and Classification Methods

Glossary and descriptions are generally in accordance with the recommendations of Australian Standards AS 1348-1986.

access control control of access1. Preventing vehicles and people crossing property lines by means of barriers or regulations. 2. Arranging matters so that vehicles and people have access at predetermined locations.amenityThat element in the layout and operation of town and country which makes for a comfortable and life rather than a mere existence. It relates also to the preservation of such characteristics of a neig as make it pleasing in appearance to both the passer-by as well as to the resident and those acrossassignment traffic assignmentProcess of allocating trips onto existing or planned routes available on the road or public transport Assignment may be based on one or more factors known to influence route selection, e.g. Travel distance, cost.at-grade crossing level crossingCrossing at the same level, such as a railway crossing which is at the same level as a road, or a no intersection.base case calibrationSystem that would exist without the introduction of the changes proposed in the project being ana observed travel patterns as accurately as possible.capacityMaximum flow of trains, vehicles, passengers or goods that can be accommodated in a transport s specified period.road capacityMaximum number of vehicles or pedestrians that can pass over a given section of a lane, road or f no med direction (or in both directions for a two-lane or three-lane road) during a given time period u prevailing road and traffic conditions. It is the maximum rate of flow that has a reasonable expect occurring. In the absence of a time modifier, capacity is an hourly volume. The capacity would n normally be exceeded without changing one or more of the conditions under which the capacity is applicablecensus collector's district (abbreviation CCD)U	ghbourhood the road. t network. time, rmal road lysed. nulate
Ife rather than a mere existence. It relates also to the preservation of such characteristics of a neig as make it pleasing in appearance to both the passer-by as well as to the resident and those acrossassignmentProcess of allocating trips onto existing or planned routes available on the road or public transport Assignment may be based on one or more factors known to influence route selection, e.g. Travel distance, cost.at-grade crossingCrossing at the same level, such as a railway crossing which is at the same level as a road, or a no intersection.base caseSystem that would exist without the introduction of the changes proposed in the project being ana calibrationcapacityMaximum flow of trains, vehicles, passengers or goods that can be accommodated in a transport s specified period.road capacityMaximum number of vehicles or pedestrians that can pass over a given section of a lane, road or f one direction (or in both directions for a two-lane or three-lane road) during a given time period u prevailing road and traffic conditions. It is the maximum rate of flow that has a reasonable expect occurring. In the absence of a time modifier, capacity is an hourly volume. The capacity would n normally be exceeded without changing one or more of the conditions that prevail. In expressing is essential to state the prevailing road and traffic conditions under which the capacity is applicable cocurring. In the absence of a time modifier, capacity is an hourly volume. The capacity is applicable is essential to state the prevailing road and traffic conditions under which the capacity is applicable is essential to state the prevailing road and traffic conditions under which the capacity is applicable is essential to state the prevailing road and commercial activity within a given area. CBDs are characterised b deni	ghbourhood the road. t network. time, rmal road lysed. nulate
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(abbreviation CCD)individual areas for which basic land use and population data are available in Australia.central business district (abbreviation CBD)Dominant area of business and commercial activity within a given area. CBDs are characterised business of pedestrians and vehicles, and a heavy dem	nder tation of not capacity, it
(abbreviation CBD) density office and retail development, large numbers of pedestrians and vehicles, and a heavy dem	he smallest
parking. Also known as central activities district (CAD).	
centroid Assumed point in a traffic zone that represents the origin or destination of all trips to or from the z Generally, the weighted centre of trip ends rather than a geometric centre of the zonal area.	zone.
commercial vehicle Road vehicle constructed specifically to convey goods, passengers or burden in the course of trade business.	e or
cordon Imaginary line drawn around a given study area at which traffic counts and interviews may be tak	en.
desire line Straight line joining two centroids and showing the desired direction of travel.	
distribution Process by which the number of trips between zones is estimated. The distribution may be measu estimated by a growth factor process or by a synthetic model such as a gravity model.	red or be
85th Percentile Value of variable characteristic of individuals in a population, possessed by at or below 85 per cer population.	nt of that
elasticity Ratio of the change in demand for a commodity to the change in price of that commodity. In transhigh ratio is termed elastic while a low ratio is termed inelastic.	sport, a
grade separation The separation of road, rail or other traffic so that crossing movements which would otherwise con effected at different elevations.	nflict are
 journey Movement involving one or more trips, e.g.: (a) a 'journey-to-work', which could involve a direct trip to work or an intermediate stop for som secondary purpose; (b) an 'origin-to-origin' journey, which could involve several trips, each for a particular purpose home journeys have also been termed 'tours'. 	
model Mathematical description of a situation which uses data on past and present conditions to make prabout the effects of changes.	edictions
passenger car unitMeasure involving the conversion of different types of vehicles into their equivalent passenger car of operating characteristics.	rs in terms
public transport Service by bus, rail, taxi or other means which provides transport to the public on a regular basis f of a prescribed fare.	is in terms
road hierarchy Grading of roads according to increasing or decreasing importance of their traffic carrying or othe	

Term	Definition
screenline	Imaginary line which splits a study area into two parts. Usually located along railway lines or rivers to minimise the number of crossing points.
sight distance	The distance measured along the carriageway over which objects of defined height are visible to a driver.
traffic	movement between locations of persons, goods and information by means of mechanical, electrical or personal methods.
base traffic	That traffic already present on a facility, or that traffic unlikely to be affected by design changes.
by-passable traffic	That traffic which can be diverted from a particular road or area because drivers do not wish to stop on that road or in that area.
local by-passable traffic	Term normally used to refer to short distance traffic that can be diverted, usually at the expense of increased distance, not increased time.
through by- passable traffic	Term normally used to refer to longer distance traffic that can be diverted without significant time or distance penalties.
converted traffic	Component of traffic which has changed its mode of travel, e.g. from train to car.
diverted traffic	Component of traffic which has changed its route but not its origin, destination, or mode of travel.
generated traffic	 Traffic created by a new or improved facility as distinct from traffic which is diverted to a facility and normal traffic increase. Traffic created by changes in land use.
induced traffic	Additional traffic resulting from some improvement in a road or in traffic arrangements.
potential traffic	Total volume which would move between two terminals assuming ideal travelling conditions.
shifted traffic	Component of traffic whose desire lines have been shifted because of change of origin or destination.
suppressed traffic	Reduction in traffic volume resulting from a change in traffic arrangements.
trip	 One-way movement from one place to another for a particular purpose (see also journey). Note: Care is required in applying this general definition. In particular, the definition of 'purpose' will affect the way in which person, vehicle or commodity movements are classified into trips. In travel surveys, the 'purpose' set often includes 'change mode' and 'serve passenger', thus making a trip correspond to a movement by only one mode. Movements for these purposes have been varyingly called 'legs', 'segments', or 'unlinked trips', in transport planning practice. For analyses, trips are often 'linked', thu making a trip embrace more than one mode and/or lower order purpose. In public vehicle operations: the movement by one vehicle or unit in one direction from the start of a route to the end of it.
external trip	Trip which starts or ends outside the study area.
through trip	Trip which starts and ends outside the study area, but which passes through the study area.
internal trip`	Trip which starts and ends in the study area.
linked trip	One-way movement from one place to another for a specific purpose, involving more than one mode of travel.
trip distribution	 The geographical distribution of trips. Process by which the total number of trips is converted to individual zone-to-zone movements.
vehicle hours of travel (abbreviation VHT)	Total vehicle hours of travel over a road segment or number of road segments for a certain period, usually a specified year.
vehicle kilometres of travel (abbreviation VKT)	Total vehicle kilometres of travel over a road segment or number of road segments for a certain period, usually a specified year.

volume

Field surveys have been used to assess conditions. Unless specifically stated otherwise, these assessments have been transferred directly to the record sheets and not modified. Field descriptions may therefore be used as an independent estimate of conditions which can be correlated with other data.

Number of persons, vehicles or pedestrians passing a given point in a specified period of time.

ON (AUSTRUADS/SAA, 1995)	
see Austroads Part 13	
see Austroads Part 13	
5.0 metres long	2 axles
8.8 metres long	2 axles
12.5 metres long	3 axles
14.5 metres long	3 axles
19.0 metres long	4 axles
19.0 metres long	6 axles
25.0 metres long	6 axles
25.0 metres long	9 axles
36.0 - 53.0 metres long	11-16 axles
	see Austroads Part 13 see Austroads Part 13 5.0 metres long 8.8 metres long 12.5 metres long 14.5 metres long 19.0 metres long 19.0 metres long 25.0 metres long 25.0 metres long

AUSTROADS Design Vehicle Classification (AUSTROADS/SAA, 1995)

Levels of Service

- Level of Service A is a condition of free flow in which individual drivers are virtually unaffected by the presence of others in the traffic stream. Freedom to select desired speeds and to manoeuvre within the traffic stream is extremely high, and the general level of comfort and convenience provided is excellent.
- Level of Service B is in the zone of stable flow and drivers still have reasonable freedom to select their desired speed and to manoeuvre within the traffic stream, although the general level of comfort and convenience is a little less than with level of service A.
- Level of Service C is also in the zone of stable flow, but most drivers are restricted to some extent in their freedom to select their desired speed and to manoeuvre within the traffic stream. The general level of comfort and convenience declines noticeably at this level.
- Level of Service D is close to the limit of stable flow and is approaching unstable flow. All drivers are severely restricted in their freedom to select their desired speed and to manoeuvre within the traffic stream. The general level of comfort and convenience is poor, and small increases in traffic flow will generally cause operational problems.
- Level of Service E occurs when traffic volumes are at or close to capacity, and there is virtually no freedom to select desired speeds or to manoeuvre within the traffic stream. Flow is unstable and minor disturbances within the traffic stream will cause break-down.
- Level of Service F is the zone of forced flow. With it, the amount of traffic approaching the point under consideration exceeds that which can pass it. Flow break-down occurs, and queuing and delays result.

Degree of Saturation: The DS is another measure of the operational performance of individual intersections. As both queue length and delay increase rapidly as DS approaches 1.0, it is usual to attempt to keep DS to less than 0.9. Values of DS in the order of 0.7 generally represent satisfactory intersection operation. When DS exceeds 0.9 residual queues can be anticipated.

Broad Classification	on	
Arterial Roads	Freeways	Those roads with full access control and grade separated intersections, whose primary function is to service large traffic movements.
	Primary Arterial Roads	Those arterial roads whose main function is to form the principal avenue of communication for metropolitan traffic movement not catered for by freeways.
	Secondary Arterial Roads	Those roads which supplement the Primary Arterial Roads in providing for through traffic movement, to an individually determined limit that is sensitive to both roadway characteristics and abutting land users.
Local Roads	Collector Roads	Those non arterial or 'intermediate' roads which distribute traffic between the arterial roads and the local street system, which provide local connection between arterial roads and which provide access to abutting property. It is the collector road, which mixes the basic functions of carrying traffic – often at excessive speed – and serving as a local residential street, that is the generator of many of the problems encountered in traffic management in Local Traffic Areas.
	Local Access Streets	Those streets, not being arterials or collectors, whose main (traffic) function is to provide access to abutting property.
Source: Austroads	Part 10, 1988	
Classification of R	esidential Streets	
Access Street	Access Place	The lowest order of street providing access to sites without any traffic generated by sites in other streets. Target maximum speed 15 km/h. Indicative traffic volume 300 vpd.
	Local Street	Access streets are generally streets where the residential environment is dominant,

Road Classification

		traffic is subservient, speed and volume are low and pedestrians and cycle movements are facilitated. Target maximum speed 40 km/h. Indicative traffic volume <200 vpd.
Collector Streets	Minor Collector	The collector street collects traffic from access streets and carries higher volumes of traffic. A reasonable level of residential amenity and safety is maintained by restricting traffic volumes and vehicle speeds. Vehicle speeds are controlled by street alignment, intersection design and, in some cases, by speed control measures. Target maximum speed 50 km/h. Indicative traffic volume <3000 vpd.
	Major Collector	The major collector is generally short and connects the collector street with the road corridor network. Fronting development should still be encouraged, but with siting conditions which ensure acceptable amenity and safety. Target maximum speed 60 km/h. Indicative traffic volume <6000 vpd.

Source: AMCORD 1995, Element 1.3 Street Networks

Road management between Roads and Maritime Services (replacing Roads and Traffic Authority) and councils in NSW provides for three categories of road: State, Regional and Local. Refer to NSW Road Management Arrangements for more details. **Legal Class** The Roads Act 1993 provides for roads to be classified as Freeways, Controlled Access Roads, Tollways, State Highways, Main Roads, Secondary Roads, Tourist Roads, Transitways and State Works. The classification of a road empowers Roads and Maritime Services (replacing Roads and Traffic Authority) to exercise broad authority over some, or all, aspects of legally classified roads and to provide financial assistance to councils. **Administrative Class** To simplify administration of the various legal road classes, the roads in which Roads and Maritime Services (replacing Roads and Traffic Authority) has an interest and council roads are grouped into a three tier administrative classification system of State, Regional and Local Roads. The schedule of roads classified under the Roads Act 1993 and of State and Regional Roads is on the RMS website.



Rhodes Waterside Mary St Heliostat Review

20/06/2018

Concept Overview

Heliostats are motorised mirrors controlled by computer software; they track the sun during the day in order to redirect reflections at a known target. The Heliostats in this application will be used to redirect sunlight up to a second set of static mirrors called the Secondary Reflector Array. This array is mounted above the Heliostats and incorporates individual mirrored panels designed to redirect sunlight into the park area. The position of the moving Heliostats combined with the angle of each fixed Secondary Reflector panel determines where the sunlight is ultimately redirected.

To simplify the flow of sunlight = Sun > Heliostats > Secondary Reflectors > Park Area

As a general rule, the amount of sunlight that can be reflected into the park is proportional to the total surface area of the mirror panels mounted on the Heliostats. The amount of sunlight that can be reflected can be measured in two ways:

- Total approximate surface area of reflected light
- Average intensity of reflected light

The two modes of measurement can be traded off against each other in order to deliver an agreed value that best serves the functionality of the nominated target area.

As light is reflected off each of the two surfaces (Heliostats then Secondary Reflectors) there are intensity losses of approximately 10% per reflection. The actual percentage loss is a result of the material properties and environmental factors such as dirt and pollution on the mirrors.

During the planning phase, each of the individual sunlight reflections can be positioned closer together or moved further apart in order to control the average intensity of sunlight in a given target zone.



58 Hotham Pde Artarmon NSW 2064

Preliminary Site Calculations



Heliostats and Reflector Array to address the
shading in the Park at 2pm.

Surface area of whole Park1210 m²Overshadowed Area of Park at 2pm428 m²Surface Area of the Roof Top1146 m²Total surface area of Heliostat Mirrors430 m²Total surface area of Reflector Mirrors312 m²Height of Building approx.1117 mHeight of Reflector Array from rooftop12 to 22 mDistance from Reflectors to Park~160 mNumber of Heliostats134Number of Reflectors97Potential number of Reflections in Park134(1) Ratio of Heliostat surface area to overshadowed park area *1 to 1(2) Relative intensity of each reflection70-80%(3) Target average illuminance in ParkTBC		
Surface Area of the Roof Top1146 m²Surface Area of the Roof Top1146 m²Total surface area of Heliostat Mirrors430 m²Total surface area of Reflector Mirrors312 m²Height of Building approx.117 mHeight of Reflector Array from rooftop12 to 22 mDistance from Reflectors to Park~ 160 mNumber of Heliostats134Number of Reflectors97Potential number of Reflections in Park1 to 1overshadowed park area *70-80%	Surface area of whole Park	1210 m²
Total surface area of Heliostat Mirrors430 m²Total surface area of Reflector Mirrors312 m²Total surface area of Reflector Mirrors312 m²Height of Building approx.117 mHeight of Reflector Array from rooftop12 to 22 mDistance from Reflectors to Park~ 160 mNumber of Heliostats134Number of Reflectors97Potential number of Reflections in Park134(1) Ratio of Heliostat surface area to overshadowed park area *1 to 1(2) Relative intensity of each reflection70-80%	Overshadowed Area of Park at 2pm	428 m²
Total surface area of Reflector Mirrors312 m²Height of Building approx.117 mHeight of Reflector Array from rooftop12 to 22 mDistance from Reflectors to Park~ 160 mNumber of Heliostats134Number of Reflectors97Potential number of Reflections in Park134(1) Ratio of Heliostat surface area to overshadowed park area *1 to 1(2) Relative intensity of each reflection70-80%	Surface Area of the Roof Top	1146 m²
Height of Building approx.117 mHeight of Reflector Array from rooftop12 to 22 mDistance from Reflectors to Park~ 160 mNumber of Heliostats134Number of Reflectors97Potential number of Reflections in Park134(1) Ratio of Heliostat surface area to overshadowed park area *1 to 1(2) Relative intensity of each reflection70-80%	Total surface area of Heliostat Mirrors	430 m²
Height of Reflector Array from rooftop12 to 22 mDistance from Reflectors to Park~ 160 mNumber of Heliostats134Number of Reflectors97Potential number of Reflections in Park134(1) Ratio of Heliostat surface area to overshadowed park area *1 to 1(2) Relative intensity of each reflection70-80%	Total surface area of Reflector Mirrors	312 m²
Height of Reflector Array from rooftop12 to 22 mDistance from Reflectors to Park~ 160 mNumber of Heliostats134Number of Reflectors97Potential number of Reflections in Park134(1) Ratio of Heliostat surface area to overshadowed park area *1 to 1(2) Relative intensity of each reflection70-80%		
Distance from Reflectors to Park~ 160 mNumber of Heliostats134Number of Reflectors97Potential number of Reflections in Park134(1) Ratio of Heliostat surface area to overshadowed park area *1 to 1(2) Relative intensity of each reflection70-80%	Height of Building approx.	117 m
Number of Heliostats 134 Number of Reflectors 97 Potential number of Reflections in Park 134 (1) Ratio of Heliostat surface area to overshadowed park area * 1 to 1 (2) Relative intensity of each reflection 70-80%	Height of Reflector Array from rooftop	12 to 22 m
Number of Reflectors 97 Potential number of Reflections in Park 134 (1) Ratio of Heliostat surface area to overshadowed park area * 1 to 1 (2) Relative intensity of each reflection 70-80%	Distance from Reflectors to Park	~ 160 m
Number of Reflectors 97 Potential number of Reflections in Park 134 (1) Ratio of Heliostat surface area to overshadowed park area * 1 to 1 (2) Relative intensity of each reflection 70-80%		
Potential number of Reflections in Park 134 (1) Ratio of Heliostat surface area to overshadowed park area * 1 to 1 (2) Relative intensity of each reflection 70-80%	Number of Heliostats	134
(1) Ratio of Heliostat surface area to overshadowed park area *1 to 1(2) Relative intensity of each reflection70-80%	Number of Reflectors	97
overshadowed park area * (2) Relative intensity of each reflection 70-80%	Potential number of Reflections in Park	134
		1 to 1
(3) Target average illuminance in Park TBC	(2) Relative intensity of each reflection	70-80%
	(3) Target average illuminance in Park	ТВС

* Whilst the surface area ratio (1) is shown as 1 to 1, there are factors in the system design and implementation that result in further inefficiencies (2). These losses may include (but not be limited to): cosine losses, complexity of site angles and distances, material reflectivity, environmental factors. Once a more detailed understanding of the system design is understood a scientific estimate of the amount (quantity and quality) of sunlight that can be delivered to the overshadowed area can be provided. A detailed Feasibility Study including Irradiation Mapping will be required to determine this data.



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Conceptual Heliostat Design



Mirror Panel is 2.0m x 2.0m with corners cut off to allow panels to be nested more closely

Not for Construction

Functionality

- The Heliostats use a mechanical drive system to move the mirrored surface.
- The mirrored surface moves in both the elevation (up and down) and the azimuth (side to side).
- The heliostat array is controlled by computer software housed in a control room within the building.
- The control software manages daily sun tracking accuracy and any system errors.

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Case Study of similar heliostat system

One Central Park (OCP), Chippendale

Central Park occupies 5.8 hectares of Sydney in Chippendale and is the visionary redevelopment of the old Carlton & United Brewery site, bordered by Broadway and Abercrombie Streets. The first residential stage of Central Park called 'One Central Park' was designed by French architect Jean Nouvel. It comprises two towers of 16 and 33 storeys, above a 5 level retail and recreation podium

TILT Industrial Design (formerly Kennovations) were contracted to Design & Construct the 40 motorised Heliostats on the rooftop of the western tower and the 320 fixed Secondary Reflector Panels suspended beneath the cantilever on the eastern tower.

The system features a similar combination of sun tracking and static mirrored panels to that proposed for Rhodes. The system captures sunlight and redirects it into the retail atrium and landscaped terraces. At night the heliostat's integrated lighting system displays video interpretations of Sydney landscapes. The installation is a key contributor to both the functionality of daylight planning for the site and the Public Artwork requirements.

The Rhodes system will utilise the same advanced design techniques, control software, and risk management techniques to ensure the safe and reliable operation of the product.

The OCP mirrored system is the largest architectural installation of its kind anywhere in the world however it will be surpassed by the Rhodes project.

The One Central Park system also incorporates 2880 LED lights within the 320 mirrored panels which form a public art work display at night. The overall energy of the LED system uses no more than a few domestic hair dryers and provides maximum effect for the public domain with minimum disruption to the adjacent residents.



The following images highlight key components and the effects of the system at OCP.

Image 1 – OCP site



Image 2 – Heliostats targeting Reflectors



Image 3 – OCP site

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Image 4 - Heliostat Installation – One Central Park, Sydney



Image 5 - Heliostat array with protective covers use to protect the mirror panel during installation and also put in place in the event of unit mechanical failure. The covers stop the mirror from producing stray reflections



Image 6 – Heliostats tracking the sun and redirecting the sunlight

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Image 7 – This is the Retail Atrium which is being lit by the Heliostat System

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Image 8 - Heliostat reflections generated on the plane of the cantilever for the One Central Park project. Results show that the image cast by the heliostat changes in shape, orientation and intensity throughout the day. The rotation of the images is caused by the rotation of the heliostat actuation mechanism as it angles the mirror to catch the sun. The change in intensity of the images is due to the combined effects of mirror reflectivity, cosine losses, as well as variation in the solar irradiance throughout the day.