

Greenbox Architecture

1 Sirius Road, Data Centre

Sustainable Travel and Access Plan
(STrAP) and Transport Access
Guide (TAG)

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This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

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Contents

	Page
1 Introduction	2
1.1 Background	2
1.2 What is a Sustainable Travel and Access Plan (STrAP) and Transport Access Guide (TAG)?	2
2 Existing Transport Condition	3
2.1 Site Location	3
2.2 Existing Travel Characteristics	3
2.3 Existing Public Transport	6
2.4 Existing Cycle Network and Infrastructure	7
3 Sustainable Travel and Access Plan (STrAP) Framework	10
3.1 Objectives	10
3.2 Proposed STrAP Measures	10
3.3 Summary of monitoring mechanisms	12
4 Mode Share Targets	13
5 Conclusion	14

Tables

Table 1: Existing mode share for people working in the area

Table 2: Home LGA of Workers travelling to DZ 114003253

Table 3: Bus routes accessing the future development

Figures

Figure 1: Site location

Figure 2: Existing Mode Share for People Working in the Area

Figure 3: Site Location in the Context of Destination Zone (DZ)

Figure 4: Public Transport Services

Figure 5: Bus routes servicing the site

Figure 6: Cycling Infrastructure

Figure 7 Pedestrian and Cycling Facilities around the Site

Figure 8: Lane Cove Bicycle Plan with the Proposed Bicycle Network

Figure 9: Transport Access Guide

1 Introduction

1.1 Background

Arup have been commissioned to produce a Sustainable Travel and Access Plan (STrAP) for the industrial development (known as Sirius Road Data Centre) located at 1 Sirius Road, Lane Cove West.

This STrAP aims to provide measures which positively influence transport demand and behaviours at the development.

Additionally, the Transport Access Guide (TAG) is also prepared for the site, which will outline active and public transport accessibility to the site in a concise manner. The TAG is attached to this document as **Appendix A**.

1.2 What is a Sustainable Travel and Access Plan (STrAP) and Transport Access Guide (TAG)?

Part R, Section 5.3 from the Lane Cove Development Control Plan (DCP), 2009 stipulates that “A *Sustainable Travel and Access Plan* is a package of initiatives to reduce car-based travel and may include mode share targets relating to a specific development.” The objective of a STrAP is to encourage residents / customers / staff to make greater use of public transport, cycling, walking and car-sharing for journeys to and from the development.

More generally, the principles of a STrAP are applied to all people travelling to and from a site. Government authorities are placing increasing emphasis on the need to reduce the number and lengths of motorised journeys and in doing so encourage greater use of alternative means of travel with less negative environmental impacts than the car.

Part R, Section 5.2 from the DCP states that the purpose of Transport Access Guides (TAGs) is to provide customised travel information for people travelling to and from a particular site or venue using sustainable modes of transport – walking, cycling and public transport.

A Transport Access Guide (TAG) can:

- Give detailed information on how to reach a site or venue using sustainable forms of transport - walking, cycling and public transport.
- Provide a quick visual snapshot at a location making it easy to see the relationship of the site to train stations, bus stops and taxi ranks and walking and cycling routes.
- Reduce the proportion of car travel to a site by letting people know how to get there by public transport, walking or cycling.

2 Existing Transport Condition

2.1 Site Location

The proposed data centre development (shown in Figure 1) is located on a vacant site at Lot 1 DP1151370. The site is located within the suburb of Lane Cove West which forms part of the Lane Cove Local Government Area (LGA). It is located approximately 12 kilometres north-west of the Sydney Central Business District. The surrounding land uses include:

- Epping Road to the Northeast zoned SP2 Infrastructure;
- Lane Cover River and Lane Cove National Park, including land, zoned E2 Environmental Conservation and RE1 Public Recreation to the west;
- Blackman Creek to the south; and
- Lane Cove West Public School to the east.



Figure 1: Site location

2.2 Existing Travel Characteristics

2.2.1 Travel Pattern

2016 Journey to Work Census data for the area surrounding the site is shown in Table 1 and Figure 2. This indicates that car-based trips¹ account for the vast majority of travel to work in the area, constituting approximately 86% of the mode share. Walking and catching the bus account for a lower percentage (approximately 10%) of trips for workers to the site.

¹ In this report a trip is defined as travel on one route, on one mode of transport

Table 1: Existing mode share for people working in the area

Mode of Travel	Proportion of Total Trips
Car Driver	84%
Car Passenger	2%
Train	5%
Bus	4%
Walk and Cycle	1%
Other modes including motorbike/scooter, not going to work and working at home	4%
Total	100%

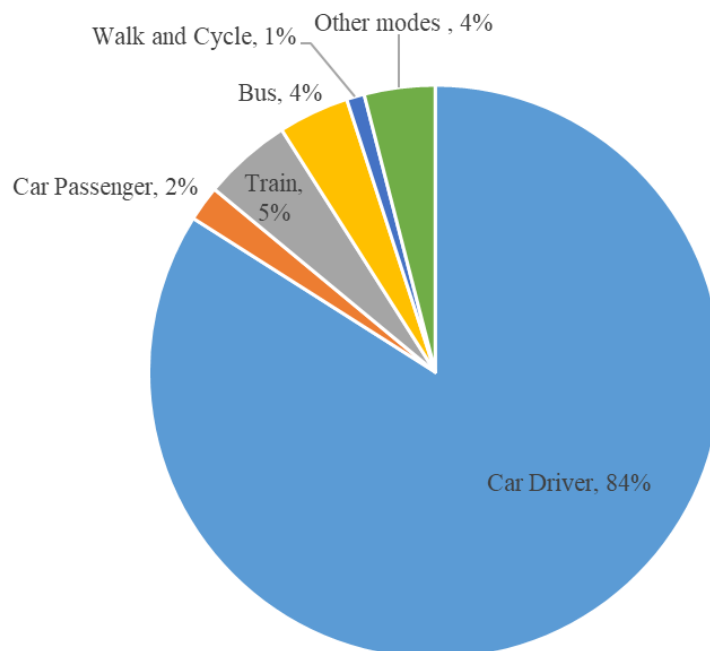


Figure 2: Existing Mode Share for People Working in the Area

2.2.2 Worker home locations

The home location of all workers travelling to the area (Destination Zone) containing the site is shown in Table 2. The Destination Zones (DZs) are built from 2016 Mesh Blocks (MB) and align with the 2016 Statistical Area Level 2 (SA2). The DZ within which the proposed site falls is shown in Figure 3. Approximately one-third of the workers in this DZ (114003253) live in the North Sydney and Ryde LGA. This indicates that walking and cycling modes could be viable travel options for many workers at the future site.

Table 2: Home LGA of Workers travelling to DZ 114003253

Worker Home LGA	Total Trips	Proportion of Total Trips
North Sydney and Hornsby	827	22.55%
Ryde	454	12.38%
Parramatta	399	10.88%
Inner West	280	7.64%
Inner South West	254	6.93%
Baulkham Hills and Hawkesbury	249	6.79%
Northern Beaches	246	6.71%
Blacktown	236	6.44%
City and Inner South	230	6.27%
Eastern Suburbs	136	3.71%
South West	119	3.25%
Central Coast	79	2.15%
Outer West and the Blue Mountains	68	1.85%
Outer South West	35	0.95%
Sutherland	32	0.87%
Illawarra	8	0.22%
Others	15	0.41%
Total	3667	100%

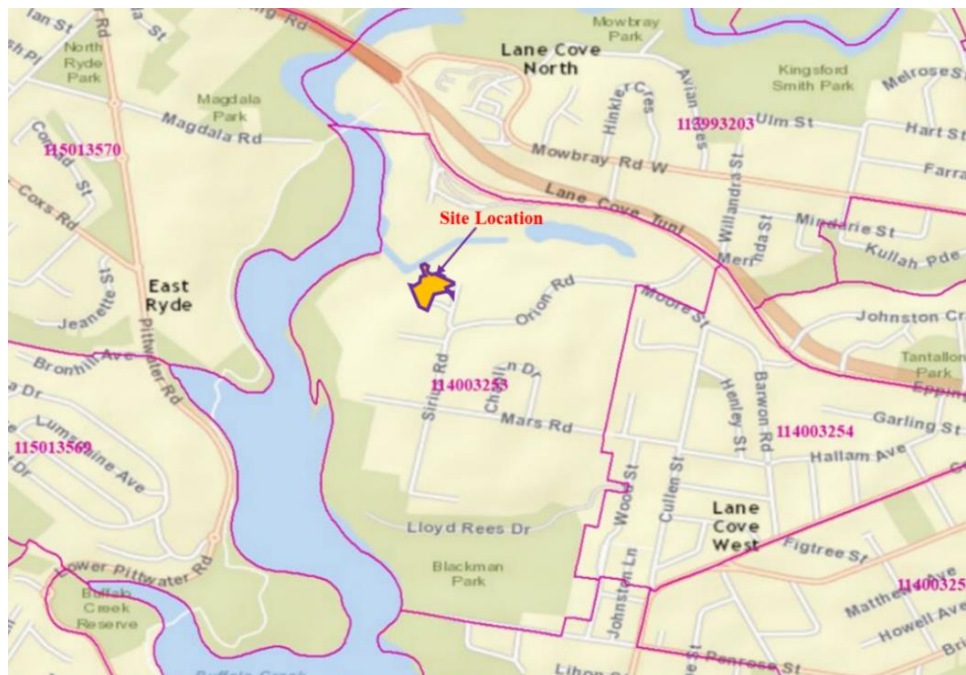


Figure 3: Site Location in the Context of Destination Zone (DZ)

2.3 Existing Public Transport

2.3.1 Bus Accessibility

The existing bus stops in the locality are shown in Figure 4. The site is relatively accessible by bus particularly given the location of the site within an industrial precinct. The site is within a reasonable walking distance to two services being the 258 and 285 services which connect the site with Sydney CBD and Chatswood. The services also provide direct access to the Chatswood and Wynyard Railway Stations.

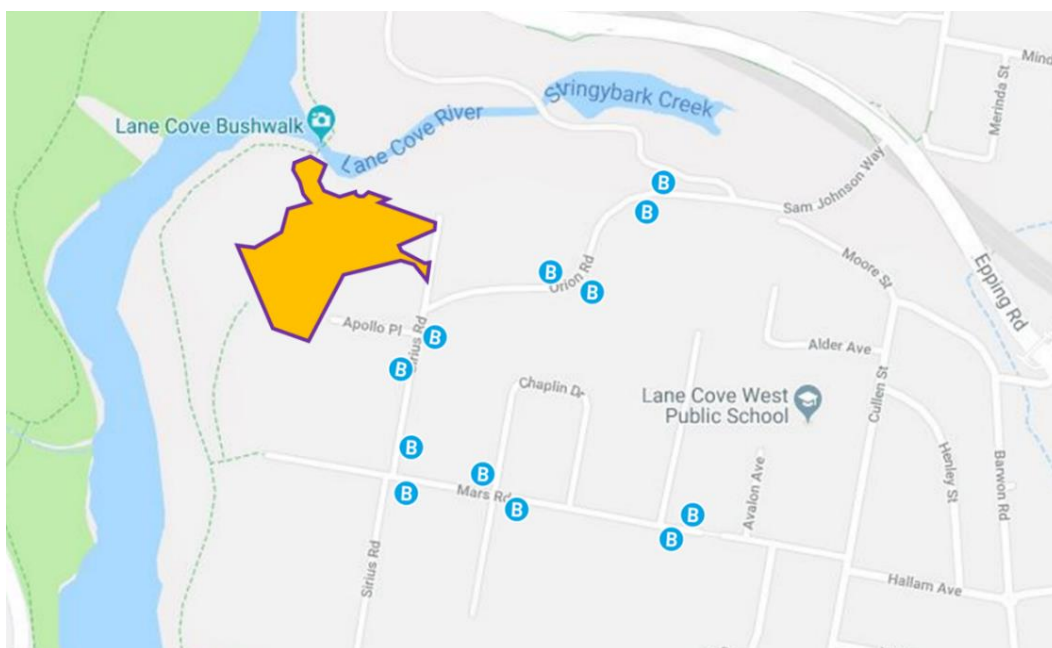


Figure 4: Public Transport Services

Buses services which can be accessed via the site are shown in Table 3. The bus network map and the locations of the bus stops are shown in Figure 5.

Table 3: Bus routes accessing the future development

Bus Route	Route Description	Frequency
		Weekday (Monday to Friday)
258	Chatswood to Lane Cove West	Every 6 mins (6:27am – 8:23am) (16:10pm – 17:26pm)
285	City Wynyard to Lane Cove West	Every 6 mins (6:22am – 9:20am) (16:32pm – 19:16pm)
	Lane Cove West to City Wynyard	Every 3 - 8 mins (7:00am – 9:35am) (16:07pm – 18:59pm)

Note: Buses timetables are subject to frequent changes. Check latest timetables for up-to-date information



Figure 5: Bus routes servicing the site

2.3.2 Train Accessibility

The closest train station is Chatswood Station, on the T1 Line. This train station can be used to access locations such as Hornsby, Berowra, Strathfield, Gordon and Sydney CBD. It is accessible by catching bus service 258. The Wynyard Station is also accessible by catching bus service 285 from the vicinity of the site.

2.4 Existing Cycle Network and Infrastructure

The site can be accessed by cyclists from the north (via Epping Road) connecting to Mars Road. Dedicated bicycle lanes are provided on both Epping Road and Mars Road which provide safe and convenient access from the site through to the surrounding area. Figure 6 shows the existing cycling infrastructure near the site.

Pedestrian access to the site is good with a comprehensive network of footpaths. Figure 7 shows the pedestrian and cycling facilities around the site.

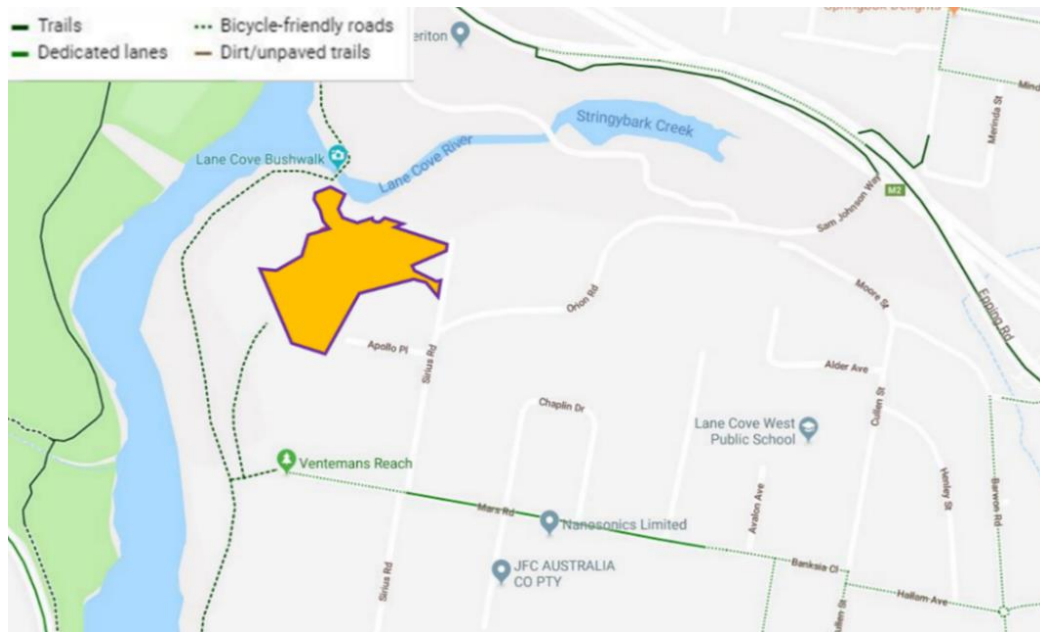


Figure 6: Cycling Infrastructure

Source: Google Maps





Figure 7 Pedestrian and Cycling Facilities around the Site

The Lane Cove bicycle plan with the proposed bicycle network is also presented in Figure 8.



Figure 8: Lane Cove Bicycle Plan with the Proposed Bicycle Network

3 Sustainable Travel and Access Plan (STrAP) Framework

3.1 Objectives

The main objectives of the Sustainable Travel and Access Plan are to reduce the need to travel and promotion of sustainable means of transport.

The more specific objectives include:

- High mode share for public transport, cycling and walking to work journeys;
- Ensuring adequate facilities are provided at the site to enable staff and visitors to commute by sustainable transport modes;
- Reduce the number of car journeys associated with business travel;
- Facilitate the sustainable and safe travel of new employees; and
- Raise awareness of sustainable transport amongst staff and visitors.

3.2 Proposed STrAP Measures

3.2.1 STrAP

Description of measure

With the transport options available to staff and other users to access the site, this Sustainable Travel and Access Plan has been prepared to promote the use of public transport, walking and cycling by patrons and employees for travel to and from work and for business-related trips.

Monitoring mechanisms

- Feedback from staff and other users travelling to the building (via the annual travel survey) as to effectiveness and usefulness of plan
- Annual travel survey of staff and visitors to be conducted to understand travel patterns and trends for people accessing the Data centre.

3.2.2 Staff Induction

Description of measure

To ensure new members of staff are aware of the Sustainable Travel and Access Plan, all new staff members should be made aware of the Plan as part of their induction process, which will include:

- A brief introduction to the plan and its purpose;
- Tour of the site to include a visit to the bicycle parking areas and shower and changing facilities; and

- Establishment of transport information packs to new staff explaining the various ways (other than a motor vehicle) of travelling to and from the site

Monitoring mechanisms

- Sirius Road Data Centre to maintain a record of a number of staff and customers inducted through the updated process as a way of understanding their exposure to the plan.
- 1 Sirius Road Data Centre to monitor the proportion of staff and other users travelling to the building by non-car modes through an annual travel survey.

3.2.3 Cycling

It is understood the future site would accommodate up to approximately 80 -100 employees at any one time. In response, 5 bicycle spaces (5% of staff number) are proposed within an enclosed room for the staff of the development to assist with promoting alternative active travel options to the site. Showers and lockers are provided to act as the suitable end of trip facilities.

All users of the building should be made aware of the bicycle parking areas.

Events such as National Bike Week and Bike2Work Days, which encourage the usage of bikes as a mode of transport, should be promoted.

Monitoring measures

- 1 Sirius Road Data Centre to monitor the demand for bicycle parking at the site through an occupancy survey undertaken every three months
- 1 Sirius Road Data Centre to monitor the percentage of staff cycling to the site through an annual travel survey

3.2.4 Car pooling

Based on the information noted in Section 2.2.2, staff demographic information already indicated that a high proportion of staff already reside within close proximity to the future building, making the site conducive to potential car pooling programs.

This could involve a simple poster on the noticeboard or staff intranet page where staff would register their interest in car pooling by indicating where they live and their shift times.

Monitoring mechanisms

- 1 Sirius Road Data Centre to monitor the number of staff utilising car pooling to access the data centre through an annual travel survey

3.3 Summary of monitoring mechanisms

The Sustainable Travel and Access plan (STrAP) will be updated annually and implemented accordingly. A summary of the proposed monitoring mechanisms supporting the STrAP is provided below.

- Feedback from staff and other users travelling to the building (via the annual travel survey) as to effectiveness and usefulness of the plan
- Annual travel survey of staff and visitors to be conducted to understand travel patterns and trends for people accessing the site.
- 1 Sirius Road Data Centre to maintain a record of number of staff inducted through the updated process as a way of understanding their exposure to the STrAP.
- 1 Sirius Road Data Centre to monitor the proportion of staff travelling to the site by non-car modes through an annual travel survey.
- 1 Sirius Road Data Centre to monitor the demand for bicycle parking at the site through an occupancy (observational) survey undertaken every three months
- 1 Sirius Road Data Centre to monitor the percentage of staff cycling to the campus through annual travel survey
- 1 Sirius Road Data Centre to monitor the number of staff utilising car pooling to access the hospital through an annual travel survey

4 Mode Share Targets

As detailed in Section 2.2.1 of this document, approximately 84% of all work-related trips to the area surrounding the future site are made by the private vehicle.

It has been assumed that as a result of the measures to be implemented by the future development to encourage alternate modes of transport, a 10% mode shift away from the private vehicle can be achieved compared to the current mode share for people working in the area.

The annual travel survey conducted by the 1 Sirius Road Data Centre will be the mechanism for monitoring whether this target will be reached. Should the target not be reached, further measures will need to be considered to promote public transport, walking and cycling to the site such as greater incentives for staff to travel via these modes.

5 Conclusion

The encouragement of sustainable and active transportation options is a major issue for various developments across NSW.

There are always opportunities to reduce car dependency to encourage travel to the future site by sustainable, alternative modes – taking particular advantage of the site's close proximity to Bus stations. A proportion of the staff working at the proposed Data Centre may also live within a walking distance of the site, in the residential areas which surround the site.

In order to promote active travel to the site, 5 bicycle parking spaces are provided within a secure room for staff.

These travel demand measures complement the objectives of the NSW Government to encourage non-car modes to make up a larger mode share of travel on roads.

Appendix A

Transport Access Guide (TAG)

A1 Transport Access Guide

A2.1 Walking

A proportion of the staff working at the Data Centre may live within a walking distance of the site, in the residential areas which surround the site. The nearest train station, Chatswood station, can be accessed by catching bus service 258.

In reviewing the availability of public transport connections to the stations it is understood Chatswood and Wynyard Stations are linked to the site by a 'door-to-door' bus route (258 and 285). Users have to walk approximately 200m (2minutes walk) to the site after alighting from the bus at the corner of Apollo Pl and Sirius Road. These services operate relatively early in the morning and late in the evening during the peak change over periods.

A2.2 Buses

Two (2) bus stops are located within the vicinity of the Data Centre. Most bus services utilise the bus stops on either side of Sirius Road, while some services also use the bus stop on Orion Road. The following bus services can be utilised by users of the site. Bus services include:

- 285 Lane Cove West to Wynyard
- 258 Chatswood to Lane Cove West

A2.3 Trains

The closest train station is Chatswood Station, on the T1 Line. This train station can be used to access locations such as Hornsby, Berowra, Strathfield, Gordon and Sydney CBD. It is accessible by catching Bus Service 258.

A2.4 Cycling

Cycling is an inexpensive, quick and healthy way to travel. For those living within 5-10 kilometres of the future site, this can save time and effort of finding parking at the building. On-site bike parking is provided at the Data Centre within a secure room for staff. Shower and change facilities are also provided to staff only.

The Transport Access Guide for the future development is shown in Figure 9 overleaf.

