City of Ryde

Integrated Transport and Land Use Strategy

Centre Report for Meadowbank

August 2007



pbai australia

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1 Meadowbank

1.1 Introduction

The Centre Report for Meadowbank accompanies the City Wide Integrated Transport and Land Use Strategy (ITLUS) report, and provides a local overview of the centre, previous work undertaken, and the transport and land use context.

The Centre Report concludes with a plan for Meadowbank, consisting of a Vision, Objectives and Recommended Actions, which correspond with the City Wide Actions.

1.2 Description of Area

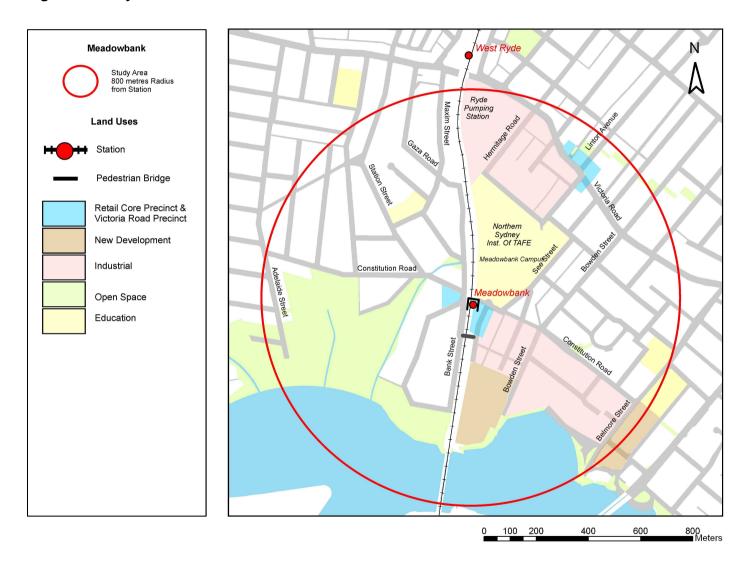
Meadowbank study area is located on the northern periphery of the Parramatta River centred on the Northern Railway line at Meadowbank station. The study area extends for 800m distance in each direction from Meadowbank Railway Station as shown in **Figure 1**.

The study area includes various zonings and land uses. Within the Meadowbank Employment Area the predominant building stock is old, often vacant and dilapidated 1-2 storey light industrial developments interspersed with new multi storey medium density residential developments. The area has a range of public land uses including Meadowbank TAFE to the northeast of the station and Meadowbank Park to the south of the station. In other sections of the study area, the predominant land uses are residential with older 3 storey residential flats concentrated to the west of the station and 1-2 storey dwellings in the remainder of the study area. A new area of open space is located at the Meadowbank ferry wharf which links to the existing riverside walking/bicycle/open space network.

The Meadowbank employment area reflects current metropolitan trends. Land use is in transition from an aging traditional industrial base of manufacturing and light industrial activity towards a vibrant, mixed use community where high technology uses and related activities are encouraged. The future character the area will be socially, economically and environmentally sustainable: a safe and healthy place where people can live, shop, work and play with less emphasis on the car. The future of Meadowbank will be an attractive employment centre with a self supporting community.

The Meadowbank area has potential for future employment and but more particularly residential development. It is a convenient location, with excellent access to road, rail and ferry networks and is close to both Sydney and Parramatta CBDs. The area is also in close proximity to rapidly growing services-related employment opportunities at Sydney Olympic Park and Macquarie Park.

Figure 1: Study Area and Land Uses



1.3 Previous Work Undertaken by Council

Previous studies, as outlined below, have been undertaken by Council in order to derive a vision, strategic framework and development controls to achieve the objectives identified for Meadowbank.

Council has undertaken a range of infrastructure works to improve transport in Meadowbank in recent years including:

- Installation of roundabout at Constitution Road and Station Street intersection;
- Installation of roundabout at Bowden Street and Bay Drive;
- New roundabout at Bowden Street and Squire Street; and,
- Additional parking in Bowden Street and Bay Drive.

1.3.1 Strategic Framework

Metropolitan Strategy

According to the NSW Governments Metropolitan Strategy 2006 designations, the Meadowbank Study area consists of the Meadowbank Employment Area (classified as an Employment Area) and Meadowbank Village (classified as a Small Village).

Ryde Planning Scheme Ordinance and Local Environment Plan No 120

The Ryde Planning Scheme Ordinance provides for legally binding controls on land use and development within the City of Ryde.

The RPSO requires that within the Meadowbank Employment Area any development is to be consistent with the Meadowbank Employment Area Masterplan. Within Meadowbank Employment Area, site specific Master plans are required for sites within Faraday Park and sites which are likely to have a significant impact.

For other areas within the Meadowbank study area but outside the Meadowbank Employment Area, the planning controls and objectives are similar to the equivalent zonings in other parts of the City of Ryde.

City of Ryde DCP 2006 - Part 4.2 Meadowbank Employment Area

The Meadowbank Employment Area section of the City of Ryde DCP was prepared on the basis of the Meadowbank Employment Area Masterplan.

The DCP outlines a range of development principles together with general and site specific development controls.

Supporting retail development is underway and is encouraged to service the needs of local residents, workers and visitors alike. The future vision for the area is a community which will have high quality public domain of parks, streets, footpaths, cycle ways and open space. A range of transport options provide access for residents, workers and visitors. The DCP was developed

in response to Urban Planning Policies including urban consolidation and integrated land use and transport planning along the foreshore of the Parramatta River in accordance with SEPP 56 (now repealed).

The DCP identifies nine separate precincts differentiated by a range of allowable land uses, building heights, built form and setbacks.

Meadowbank s94 Contribution Plan (2005)

The Meadowbank s94 Contributions Plan provided a mechanism for the collection of funding from development in order to undertake works in accordance with the Meadowbank Employment Area Masterplan including works relating to:

- Community facilities;
- Streetscape improvements;
- Access and traffic facilities; and,
- Open space and the public domain.

This Contributions Plan is currently being updated as part of the general review of Ryde s94 Plan.

Meadowbank Employment Area Masterplan (1998)

The Meadowbank Employment Area Master Plan sets the vision for a mixeduse area of primarily commercial and light industrial uses, with medium density residential development concentrated around the railway station, the ferry and the Parramatta River foreshore in keeping with the principle of transit oriented development.

A site specific masterplan was included for Faraday Park which outlined relevant controls and provided detail on the form of development, including roads pedestrian and cycle ways and allowable building envelopes. This site has since been developed largely in accordance with the site masterplan.

The Masterplan was originally developed in 1998 and updated in June 2006. Council is currently investigating the economic viability of maintaining the land use mix that is specified in the Meadowbank Employment Area Masterplan.

1.3.2 Technical and Environmental Input Studies

Meadowbank Employment Area Planning Study (1998)

As part of the Meadowbank Employment Area Masterplan, a Planning Study was undertaken by Hassel in conjunction with Hill PDA and Ove Arup and Partners. This study investigated the existing character, infrastructure, functional and economic characteristics of the area and the strategies outlined in the study informed the Masterplan.

1.3.3 Summary of Planning Objectives

According to the Meadowbank Employment Area Masterplan, the objectives for Meadowbank include:

- Be a unique place characterized by a mix of residential, commercial, support retail and light industrial uses;
- Be a vibrant, viable and economically sound employment centre;
- Be a place that facilitates convenient access between work, home and leisure;
- Be a place specifically designed for the enjoyment and use of pedestrians and cyclists;
- Has safe, attractive and convenient public spaces that are well used and well connected; and,
- Contain a mix and arrangement of uses that appropriately integrate with existing surrounding activities.

Note: Clauses 722 B and C of the Ryde Planning Scheme Ordinance refer to details for Master plans.

1.4 Land Use

The projected growth in employment and residential population within Meadowbank is shown below.

Table 1: Resident and Worker Population

	2004	2006	2011	2014	2016	2021	2024	2034
Worker Population	2,302	-	-	3,235	-	-	4,168	4,168
Resident Population	2,079	3,226	5,345	-	5,345	5,956	-	-

(Employment figures derived from City of Ryde figures and residential figures derived from Planning NSW MDP projections 2006 combined with 2006 residential estimate provided by the City of Ryde. Assumptions based on average occupancy of 2.625 persons per residence assuming a 75%:25% split between detached dwellings and attached dwellings/flats)

Within the Meadowbank Employment Area an additional 1,040 residences are projected including:

- 216 units within Faraday Park development;
- 107 units at the corner of Belmore Street and Rothesay Avenue;
- 356 units at the Holdmark site at 82-102 Belmore Street; and,
- 60 units at 9-15 Angus St and various smaller developments along Bowden and Porter Streets and other sites in the remainder of the Meadowbank Employment Area.

Insert results of travel model matrices for Meadowbank. This will consist of the origins and destinations information for Meadowbank. The number of trips for origins and destinations for 2006, 2016 and 2026 will be shown.

1.5 A Vision for Meadowbank

Meadowbank will be a vibrant, robust and economically viable place of mixed uses and activity where people are able to live, work and play. Meadowbank will evolve as a transit oriented community, which optimised the existing public transport network, facilitates access between home and work and reduces the reliance on public transport. Distinct, safe and clear pedestrian and cycle access will be encouraged and developed.

1.6 Trip Demand

The NSW Transport, Population and Data Centre's (TPDC) Strategic Travel Model (STM) for the metropolitan area was used to extract traffic data for the current year (2006) and future years (2016 and 2026) for the Ryde area. The STM uses Sydney Statistical Division and is based on TPDC's 2001 Travel Zone system.

Car Driver and Public Transport trips are summarised in **Table 2**. Full modelling outputs are included Appendix L of the City Wide Report.

Table 2: Meadowbank Travel Zone Origins and Destinations – AM 2-hour Peak Period

Meadowbank (TZ 484*) – Internal Ryde LGA Car Trips (Units: Car Driver)

Wicadow	Dank (12 464") – Internal Ryde L	2006	(Onits: Oar Diff	2016		2026	
		То	From	То	From	То	From
476	Marsfield	30	25	30	25	30	25
477	North Ryde	13	37	14	45	14	51
478	Ryde East	16	16	16	17	17	17
479	Ryde	30	27	30	27	32	29
480	Eastwood	35	32	34	32	38	35
481	Denistone East	62	73	62	72	64	72
482	Denistone	26	44	26	44	26	44
483	West Ryde	65	80	63	79	63	79
484	Meadowbank	105	105	100	100	1	1
485	Ryde Bridge	68	97	67	91	69	90
486	Putney	33	34	33	34	34	35
487	Field Of Mars	21	36	21	35	22	36
784	Macquarie Uni	14	66	14	72	14	81
785	Northern Suburbs Cemetery	4	28	4	33	4	38
	Total (Internal)	522	700	514	706	428	633
	External to Ryde LGA	1,043	1,712	1,084	1,811	1,125	1,964
	Total (Internal & External)	1,565	2,412	1,598	2,517	1,553	2,597

Meadowbank (TZ 484*) - Internal Ryde LGA Public Transport Trips (Units: Passengers)

Wica	dowbank (12 464) - Internal Ryde	2006	isport Trips (or	2016	,,	2026	
		То	From	То	From	То	From
476	Marsfield	1	2	1	2	1	2
477	North Ryde	1	4	1	5	1	5
478	Ryde East	0	0	0	0	0	0
479	Ryde	1	0	1	0	1	0
480	Eastwood	1	3	1	3	1	3
481	Denistone East	1	2	1	2	1	2
482	Denistone	1	5	1	5	1	4
483	West Ryde	0	3	1	3	1	3
484	Meadowbank	1	1	1	1	1	1
485	Ryde Bridge	1	9	1	8	1	8
486	Putney	0	3	0	2	0	2
487	Field Of Mars	0	3	0	3	0	3
784	Macquarie Uni	2	16	1	16	2	17
785	Northern Suburbs Cemetery	0	3	0	4	1	4
	Total (Internal)	10	54	10	54	12	54
	External to Ryde LGA	188	601	208	662	220	710
	Total (Internal & External)	198	655	218	716	232	764

^{*}Travel Zone differs in size and coverage to the ITLUS centre study area.

1.7 Transport Modes

1.7.1 Rail

Existing

Meadowbank has one train station located on Constitution Road in the heart of Meadowbank. Meadowbank is serviced by the Northern Line that runs from Hornsby to North Sydney via Strathfield. The Northern Line interchanges with the Western, Inner West and South lines at Strathfield, and with the North Shore line at Hornsby. Interchange between the Northern Line and the Eastern Suburbs, Bankstown and Airport Line can be made at Central. There is no direct interchange between the Northern Line and the Cumberland and Carlingford Lines.



As shown in **Table 3** Meadowbank Station has good facilities. Meadowbank Station has recently undergone an Easy Access upgrade and is accessible with assistance.

Table 3: Meadowbank Station Facilities

Meadowbank
Υ
Υ
Υ
N
Υ
N
Υ
N
Υ
Υ
N
Υ
(30 spaces)
Υ

ITLUS - Meadowbank PBAI Australia

The service frequency during the week and at the weekend at Meadowbank Station is

outlined in Table 4 below. Meadowbank is currently the third most frequently serviced station in the LGA.

Table 4: Train Frequencies at Meadowbank Station

	To City					From City					
Period	First Train	Last Train	No. of	No. of Services			Last Train	No. of Services			
	Halli		AM	PM	Day	Train	TTAIT	AM	PM	Day	
Weekdays	4:54 AM	12:07AM	12	13	57	5:50 AM	12:20 AM	16	12	59	
Weekends	5:07 AM	12:07 AM	6	6	39	5:49 AM	12:19 AM	6	6	38	

^{*} Number of services in the AM peak period (0700-1000), PM peak period (1600-1900) and all day (24 hours).

Committed

A new time table for Northern Line services will be introduced in 2008, in order to integrate the rail network with the opening of the Epping Chatswood Rail Link (ECRL).

The existing Northern Line rail corridor between West Ryde and the Parramatta River is likely to be affected by the proposed Main North Line track amplification (announced in the NSW State Plan, 2006). The proposal aims to increase rail capacity for freight and passenger services and to improve the reliability of rail services by providing capacity to segregate fast passenger services from slower passenger services and freight services.

1.7.2 Bus

Existing

Meadowbank has a small bus interchange consisting of two stops located at Meadowbank Wharf. The facilities at the bus interchange are of good quality; providing seating, shelter and timetable information. The bus routes serving Meadowbank are shown in Figure 2.



Details of route and service frequencies by route for Meadowbank are shown in Table 5. Meadowbank is reasonably well serviced by buses and when compared to other centres in Ryde LGA.

On weekdays five routes serve the Meadowbank area with 219 buses serving these routes. Almost half of these services occur during the AM and PM peak periods. On Saturday the number of routes serving the area is reduced to two routes providing 104 services. On Sunday there are only two routes providing 74 services.

Of the five routes running through the Meadowbank study area, two routes run to the city. There are two routes going to Parramatta and one route to Chatswood and Carlingford. Three of the five routes running through Meadowbank terminate elsewhere in the Ryde LGA, making Meadowbank relatively accessible internally to other centers in Ryde.

The bus frequency analysis shows that Meadowbank is well served during the AM and PM peak periods from Monday to Friday. Weekend and evening services are more limited, especially on Sundays.

Committed

There are no specific proposals for bus services in the area. However the Ministry of Transport in conjunction with Sydney Buses are currently developing an Integrated Network Planning process to identify opportunities for service adjustments in keeping with land use changes and travel patterns.

Table 5: Meadowbank Bus Service Analysis

Weekday (2-way)

Route Number	Route		To Direc	tion		From Direction				
		First Bus Last Bus	No	o. of Servic	:es*	First Bus Last Bus	No.	of Service	:es*	
			AM	PM	DAY		AM	PM	DAY	
507	Circular Quay to Macquarie University (cnr Bowden and Constitution)	6:39 AM 9:53 PM	5	6	27	6:56 AM 9:05 PM	5	6	27	
513	Carlingford to Meadowbank Wharf (at Wharf)	7:03 AM 2:20 PM	5	0	10	10:49 AM 7:06 PM	0	4	10	
520 L20	Circular Quay to Parramatta	4:49 AM 12:00 AN	8	11	44	5:56 AM 12:59 AM	7	13	46	
524	Parramatta to Ryde	8:52 AM 2:57 PM	2	0	7	9:02 AM 3:08 PM	1	0	7	
534	West Ryde to Chatswood	5:52 AM 8:57 PM	5	7	19	5:47 AM 10:05 PM	5	10	22	

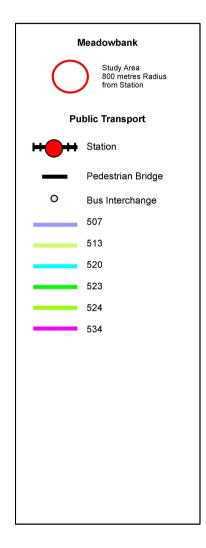
Saturday (2-way)

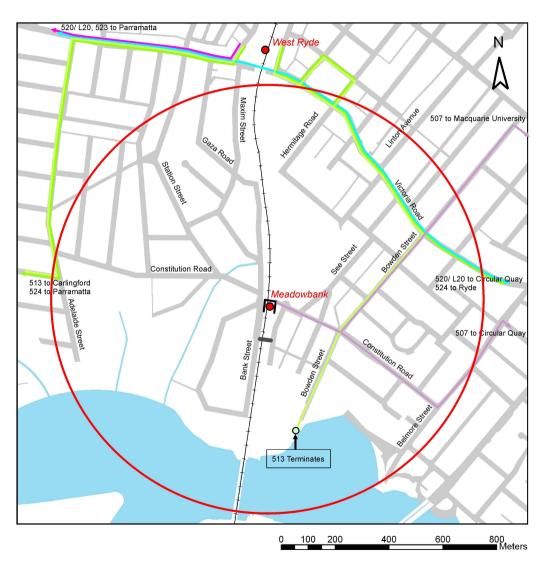
Route Number	Route	To Direct	ion				From Direction					
		First Bus	Last Bus	No	. of Servic	es*	First Bus	Last Bus	No. of Services*			
				AM	PM	DAY			AM	PM	DAY	
507	Circular Quay to Macquarie University (cnr Bowden and Constitution)	8:21 AM	7:16 PM	2	6	21	8:03 AM	5:33 PM	4	4	20	
513	Carlingford to Meadowbank Wharf (at Wharf)	-	-	-	-	-	-	-	-	-	-	
520 L20	Circular Quay to Parramatta	6:16 AM	1:02 AM	6	6	32	6:25 AM	12:02 AM	5	6	31	
524	Parramatta to Ryde	-	-	-	-	-	-	-	-	-		
534	West Ryde to Chatswood	-	-	-	-	-	-	-	-	-	-	

Sunday (2-way)

Route Number	Route	To Direct	ion				From Direction					
		First Bus	Last Bus	No	No. of Services*			Last Bus	No. of Services*			
				AM	PM	DAY			AM	PM	DAY	
507	Circular Quay to Macquarie University (cnr Bowden and Constitution)	9:07 AM	7:19 PM	1	3	11	8:09 AM	5:07 PM	2	2	10	
513	Carlingford to Meadowbank Wharf (at Wharf)	-	-	-	-	-	-	-	-	-	-	
520 L20	Circular Quay to Parramatta	6:57 AM	10:55 PM	4	6	27	7:58 AM	10:57 PM	4	6	26	
524	Parramatta to Ryde	-	-	-	-	-	-	-	-	-		
534	West Ryde to Chatswood	-	-	-	-	-	-	-	-	-	-	

Figure 2: Public Transport Services





1.7.3 Ferry

Existing

The Sydney Ferries Parramatta River service from Circular Quay to Parramatta serves two locations within the Ryde LGA: Kissing Point and Meadowbank. Meadowbank ferry wharf is adjacent to some key regional land uses like Meadowbank TAFE and the former Meadowbank industrial area which is now being developed for high density residential use.

Meadowbank wharf is fully accessible and has seating, shelter and timetable information. The 513 route stops at the bus shelter at Meadowbank wharf.

Table 6: Ferry Frequencies at Meadowbank Wharf

		To City	From City							
Period	First Ferry	Last Ferry	No. of Services			First Ferry	Last Ferry	No.	of Serv	ices
			AM PM Day				AM	PM	Day	
Weekdays	6:35 AM	10:27 PM	6	6	24	6:45 AM	10:29 PM	8	3	24
Weekends	5:37 AM	10:22 PM	1	7	17	7:15 AM	10:24 PM	3	1	16

^{*} Number of services in the AM peak period (0700-1000), PM peak period (1600-1900) and all day (24 hours).

Source: www.131500.com.au

Meadowbank also has a linking bus service to West Ryde and Carlingford. The 2001 census data shows that less than 1% of commuters use the ferry to get to and from work and therefore this mode currently does not have a major influence on commuting patterns in the LGA. However, there are current capacity issues on the Parramatta River services which if addressed may have a positive effect on ferry patronage in the Ryde LGA.



Committed

Sydney Ferries have recently undergone a review of ferry services. This review has resulted in timetable changes to the Parramatta River services to deal with current capacity issues on this service.

All services between Circular Quay and Rydalmere stop at Meadowbank with the exception of the hourly services from 9.00 am to 4.00 pm westbound and from 10.00

^{*} Number of services in the AM peak period (0700-1000), PM peak period (1600-1900) and all day (24 hours).

am to 5.00pm eastbound which service Circular Quay, Rydalmere and Parramatta only. Sydney Ferries could be lobbied for these services to stop at Meadowbank due to the increased residential development; however, it is anticipated that this would not be considered favourably due to the increase in travel time to Parramatta that would

be incurred. Extra ferries to Meadowbank during the peak periods should be considered and lobbied for to service the increased residential population.

More people should be encouraged to use the existing services for both commuting and recreation. Information about ferry services is only available from the wharves or the 131500 website and phone line. Information on the existing services and wharves should be made available to the local community.

1.7.4 Taxi

Existing

There are no major taxi ranks in Gladesville. It has been suggested that long waiting times are experienced at the taxi ranks in Ryde due to a lack of taxi services generally in the area.

Committed

There are no specific proposals for taxi services in the area.

1.7.5 Community Transport

Community transport services cover all of the Ryde LGA and are discussed in the City Wide Report Section 5.3.3.

1.7.6 Walking

Existing

The local pedestrian network including pedestrian crossings is show in Figure 2.

Signalised crossings are provided along Victoria Road and Bowden Street. Zebra crossings are situated on Constitution Road (by the station), Belmore Street and Maxim Street (by the school).

The railway is a major barrier for east/ west pedestrian movement in the study area. There are three crossings points over the railway. These are at Meadowbank Station pedestrian bridge, Underdale Lane Bridge and at the car park adjacent to Meadowbank Wharf. There are no crossing opportunities north of the Meadowbank Station pedestrian bridge, which is the centre of the study area.

Victoria Road also acts as a barrier in the north/south direction for the study area. There are only two opportunities for crossing Victoria Road in the study area, and this impacts on accessibility to the northern side of Victoria Road and beyond.

All informal footpaths identified in **Figure 2** have the potential to be formalised. Key areas missing footpaths include:

- Station Street (west side) between Rex Street and Constitution Road;
- Sherbrooke Road (on both sides) between Mons Avenue and Station Street;
- Grand Avenue (on both side) between Constitution Road and Annie Lane;

Union Street (north side) between Maxim and Bank Streets; and,

 Bowden Street (east side) between Meadowbank Wharf and Constitution Road.





New and old footpaths by Shepherds Bay Village

Part of Parramatta Valley Cycleway starting a Meadowbank Memorial Park

Pedestrian Accessibility

Figure 3 shows the 400m and 800m walk isochrones centered on the railway pedestrian bridge. Overall the 400 m isochrone radiates regularly in all directions, reflecting fairly high levels of accessibility with the 400m radius of the station. The 800m is also circular, but isn't as strong in the south west and north east corners. This is mainly due to the restricted footpaths at the east end of Meadowbank Memorial Park and the limited crossings along Victoria Road respectively. Pedestrian accessibility to the east and west is much stronger.

Accident Analysis

An analysis of pedestrian and cycle accidents in the Ryde LGA was carried out for the five year period from 2000 to 2004 as shown in **Figure 6.3** and **6.4** of the **City Wide Report**.

A number of solutions could be provided the accident cluster locations including:

- Separate pedestrian phases (green time not shared with turning traffic);
- Longer green times;
- Pedestrian refuges;
- Pedestrian barriers / guard rail;
- Reduced vehicle speeds;
- Speed limit enforcement;
- Improve street lighting;
- Improve vehicle and pedestrian visibility; and/or
- Count down displays.

A detailed study of the type of pedestrian accidents occurring in this area should be carried out as part of the proposed PAMP to determine the most appropriate mitigating measures required at this location. It should be investigated if the presence of the hotel in the accident cluster location contributes to the level of accidents.

Committed

According to Council's Management Plan, Council is committed to constructing a new footpath at Underdale Lane (during 06/07).

1.7.7 Cycling

Existing

The existing and proposed cycling network is shown in Figure 5.

The RTA Action for Bikes 2010 (1999) sets out a 10 year plan for a series of arterial bicycle networks across NSW.

As shown in **Figure 6.4** in the **City Wide Report** a number of cycle accidents have occurred in the vicinity of Meadowbank.

Committed

Ryde have just recently released their Ryde Bicycle Strategy and Masterplan in January 2007. The cycling network for the Meadowbank study centre is show in **Figure 5**. The regional cycle routes passing through the Meadowbank study area include:

- RR01 Hornsby to Strathfield Rail Trail via Eastwood; and,
- RR09 Parramatta Valley Cycleway.

The local bicycle routes passing through the Meadowbank study area include:

- LR03 Eastwood to Parramatta River via West Ryde;
- LR05 North Ryde to Meadowbank; and,
- LR15 West Ryde to Gladesville.







Bicycle parking across the road from Meadowbank Station on Banks Street

Figure 3: Pedestrian Network

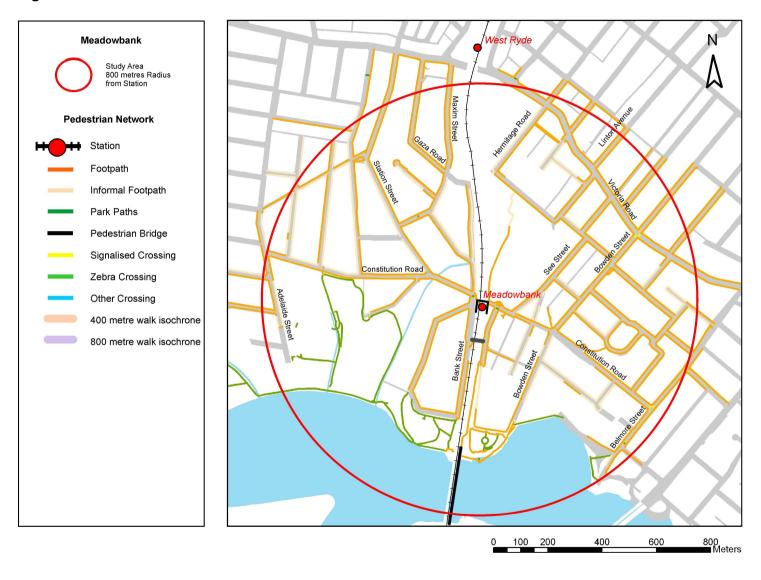
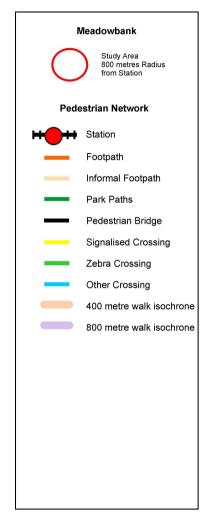


Figure 4: Pedestrian Accessibility



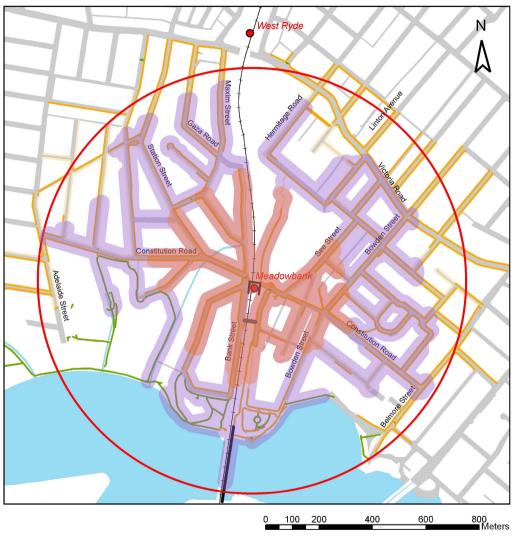
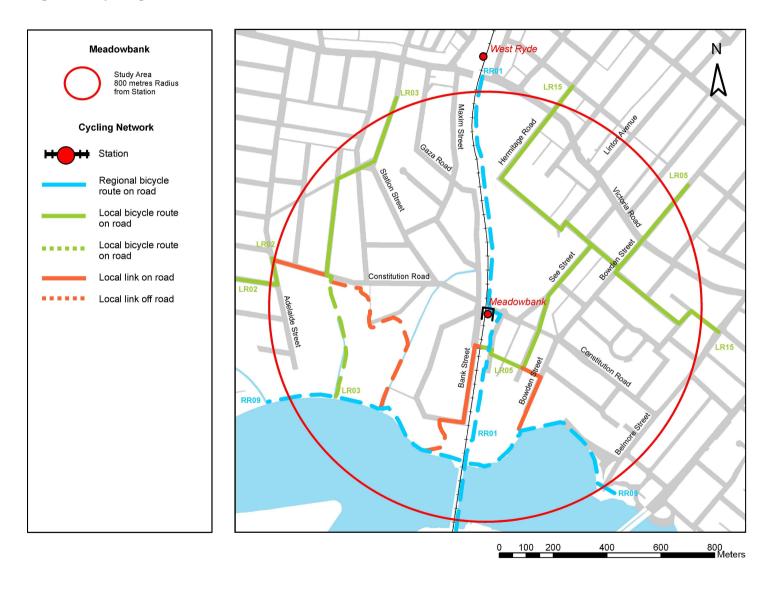


Figure 5: Cycling Network



1.7.8 Road

Existing

The existing road network is shown in **Figure 6**. The main arterial road in the Meadowbank study area is Victoria Road, running in the east/west direction in the north eastern section of the study area. Victoria Road has an AADT in the vicinity of 58,335. All other roads in the study area are local roads.

The signalised crossings in the Meadowbank study area occur along Victoria Road, at the intersections of Hermitage Road and Bowden Street, and along Belmore Street, at the intersections of Junction Street and Constitution Road. All of the intersections controlled by roundabouts are situated where Constitution Road intersects with other major local roads. All other intersections are priority controlled. The speed control humps in the Meadowbank study area are located near the railway station on Constitution Road or near schools, and on Maxim Street and Belmore Street.





Corner of Constitution Road and Belmore Street facing north

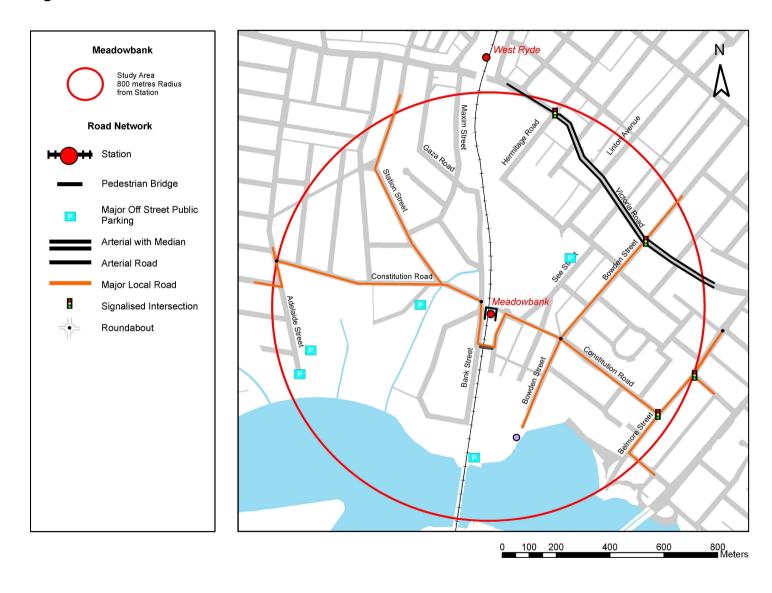
Hermitage Road facing north

Committed

According to Council's Management Plan, Council is committed to constructing the following road works in Meadowbank:

- Roundabout at Station Street and Dunmore Road (during 06/07);
- Roundabout at Mons Avenue and Dunmore Road/Rex Street (during 06/07);
- Traffic signals at Constitution Road and Bowden Street (during 07/08);
- Traffic signals at Constitution Rd and Railway Street (during 07/08);
- Undertaking a traffic study for Meadowbank (during 08/09);
- Construct a bridge at Constitution Road/Angus Street (during 08/09);
- Roundabout at See Street and Angas Street (during 09/10); and,
- Roundabout at Constitution Road and See Street (during 09/10).

Figure 6: Road Network



1.7.9 Parking

Existing

At present off street car parking spaces include:

- Meadowbank Wharf (66 off street spaces);
- Meadowbank Park including Ross Smith Avenue (427 off street spaces); and,
- Meadowbank TAFE (See Street).

Committed

No additional public car parking facilities are proposed by Council for this area.

17 ESS MODERATION

1.8 Opportunities and Constraints

The review of the transport and land use context has allowed constraints and opportunities to be identified.

1.8.1 Constraints

The following constraints have been identified:

- The fringes of the Meadowbank area are well servers by Victoria Road services, but the Station and Ferry Wharf are each only serviced by a single bus service:
- There is only a single crossing point of railway line limits pedestrian, vehicular and cycle access;
- The distance between ferry station and train station limits the opportunities for direct transport interchange:
- There is large size of street blocks particularly around Faraday Park;
- Lack of direct sight lines and clarity between public and private areas; and,
- The quality of building stock in Meadowbank Urban Village is currently degraded.

1.8.2 Opportunities

The following opportunities have been identified:

- Opportunity for service adjustments through the MoT's Integrated Network Planning process;
- Providing additional roundabouts as outlined in the Meadowbank Employment Area Masterplan at Nancarrow/Bowden, Constitution Road/Constitution Road West, Belmore/Rothesay, Porter/Waterview, Porter/Well;
- Potential for new through block pedestrian connections between:
 - o Porter Street and Belmore Street,
 - Church Street and Porter Street,
 - o Nancarrow Avenue and Rothesay Avenue,
 - Belmore Street and Nancarrow Avenue.
 - o Nancarrow Avenue and Rothesay Avenue, and
 - o Avenue as detailed in Meadowbank Employment Area masterplan.
- Improving pedestrian connection and visual connectivity from ferry wharf to train station;
- Developing cycle link from Meadowbank Station to West Ryde Station:
- Upgrading the building stock in Meadowbank Urban Village thereby improving public domain;
- Potential for improving the streetscape/pedestrian linkage from the existing 'character' building stock in Meadowbank Urban Village with the new retail at the Water Point Building; and,
- There are opportunities at the local level to enhance bus interchanges including: provision of information, improving access to stations for all modes, improving the cleanliness and comfort of trains and enhancing station environments.

1.9 A Vision for Meadowbank

The vision for Meadowbank identifies that in the future, Meadowbank will observe the key aspects of the urban villages vision for Ryde and be part of a network of interconnected multi-use urban villages within Ryde that will adhere to the principles of environmental sustainability, the integration of work, commerce, housing, open space, education, cultural and community uses, densities to support public transport, the use of urban design to achieve aesthetic amenity. In doing so, it will maintain the area's central role as a strong employment centre.

1.10 Objectives for Meadowbank

The proposed objectives for Meadowbank are:

- Increased safety;
- Improved amenity and identity;
- Economic prosperity; and,
- Management of through traffic.

1.11 Recommended Actions

Recommended actions for Meadowbank are summarised in the following tables:

- A1 Public Transport, Community Transport, Personal Public Transport and Taxis Actions;
- A2 Walking and Cycling Actions;
- A3 Road Management Actions;
- A4 Transport and Land Use Planning Actions; and,
- A5 Travel Demand Management Actions.

Relevant city wide actions are included (from the City Wide ITLUS Report), along with specific local actions.

A1 - Public Transport, Community Transport, Personal Public Transport and Taxis Actions – Summary

Action	Primary Stakeholders	Secondary Stakeholders	Timescale	Cost to CoR
Mutually Beneficial Partnerships	CoR, STA, Sydney Ferries, RailCorp,, Developers	RTA, MoT, community	Short Term (Pilot project) Medium - Long Term	Low
Public Transport Information	CoR, Community.	STA, Sydney Ferries, CityRail	Short Term	Low
Demand Responsive Transport	CoR, Community.	MOT, STA, Community Transport, Taxi operators	Short Term	Medium
Bus Infrastructure	CoR, STA	RTA, MoT	Short – Medium Term	Low -High
Train Station Infrastructure	CoR, RailCorp		Short Term	Low - High
Lobby for improved Public Transport Services				Low
Improved bus links to station and ferry wharf.	CoR, STA, MoT, RTA, Taxi Council	Community	Short – Medium Term	
Increased off peak frequencies				
 Accessible buses 				
 Strategic Bus Routes 				
 Connection to SOP town centre 				
Legal taxi pick up/set down areas				

A2 - Walking and Cycling Actions – Summary

Action	Primary Stakeholders	Secondary Stakeholders	Timescale	Cost to CoR
Improved Safety at Pedestrian Crossings	CoR, RTA	Community	Short Term	Medium
Generic Treatments	CoR, RTA	Community	Short – Medium Term	Low – High
Accessibility Mapping	CoR,	STA, CityRail, Sydney Ferries	Short – Medium Term	Medium
Accessibility Audits	CoR, RTA, developers	Community, STA, CityRail, Sydney Ferries	Short Term (existing areas) Ongoing (DA approvals)	\$3,000 per site*
Pedestrian Access and Mobility Plan	CoR, RTA	Community, STA, CityRail, Sydney Ferries	Short Term	Medium
Accident Clusters	CoR, RTA	Community, STA	Short term	Medium - High
Detailed analysis of pedestrian accidents and design of mitigating measures including: Separate pedestrian phases (green time not shared with turning traffic) Longer green times Pedestrian refuges Pedestrian barriers / guard rail Reduced vehicle speeds Speed limit enforcement Improve street lighting Improve vehicle and pedestrian visibility Count down displays Improve linkages between station and foreshore path Potential new footpaths: Station Street (west side) between Rex Street and Constitution Road	CoR	Community	Short – Medium Term	Medium - High

sides) between Mons Avenue and Station Street Grand Avenue (on both side) between Constitution Road and Annie Lane Union Street (north side) between Maxim and Bank Streets Bowden Street (east side) Meadowbank between Wharf and Constitution Road Potential for new through block pedestrian connections between: Porter Street and Belmore Street Church Street and Porter Street Nancarrow Avenue and Rothesay Avenue Belmore Street and Nancarrow Avenue, Nancarrow Avenue and Rothesay Avenue Avenue as detailed in Meadowbank Employment Area masterplan Improving pedestrian connection and visual connectivity from ferry wharf to train station Developing cycle link from Meadowbank Station to West Ryde Station

^{*} Accessibility audits requested as part of the DA process will be supplied by the applicant.

A3 - Road Management Actions – Summary

Action	Primary Stakeholders	Secondary Stakeholders	Timescale	Cost to CoR
Improvements on Arterial Roads				
Improved safety at pedestrian crossings	CoR, RTA	Community	Short Term	Low
 Generic Treatments for walking and cycling 	CoR, RTA	Community	Short – Medium Term	
Improvements on Council Roads				
■ LATMs	CoR	STA, Community	Short Term	Medium -
Improved safety at Pedestrian	CoR, RTA	Community	Short Term	High
Crossings	CoR	STA, Community	Ongoing	
 Generic treatments for walking and cycling 	CoR	STA, Community	Ongoing	
 Reallocation of road space 				
Road Network Performance Standards	CoR, RTA	STA, Community	Ongoing	Medium - High
Local Actions:				
Providing additional roundabouts as outlined in the Meadowbank Employment Area Masterplan at:	CoR	Community	Short – Medium Term	Low - Medium
Nancarrow Avenue / Bowden Street				
Constitution Road / Constitution Road West				
Belmore Street / Rothesay Avenue				
Porter Street / Waterview Street				
■ Porter Street / Well Street				

A4 - Integrated Land Use Planning / Car Parking Actions – Summary

Action	Primary Stakeholders	Secondary Stakeholders	Timescale	Cost to CoR
Public Transport Accessibility Levels (PTAL) Analysis	CoR	STA, CityRail, MoT	Short Term	Low
Mixed Land Use	CoR	Developers, Community	Medium – Long Term	Low
Public Car Parking	CoR	Community	Short – Medium Term	Low
Private Car Parking	CoR	Developers	Short – Medium Term	Low
Motorcycle / Scooter Parking	CoR	Community	Short Term	Low
Street Networks	CoR	Community, Developers	Short Term	Low

A5 - Travel Demand Management Actions - Summary

Action	Primary Stakeholders	Secondary Stakeholders	Timescale	Cost to CoR
Workplace Travel Plans	CoR	Employers, Community	Short – Medium Term	Low
Residential Travel Plans	CoR	Developers, Community	Short – Medium Term	Low
School Travel Plans	CoR	Schools, Community	Short – Medium Term	Low
Car Pooling	CoR	Community	Short – Medium Term	Low
Car Club	CoR	Community	Short – Medium Term	Low
Transport Access Guides	CoR	Community, Developers	Short – Medium Term	Low
TravelSmart	CoR	Community	Medium – Long Term	Medium - High