

5.4 POSSIBLE PROJECTS | PRECINCT C | LAKE FORESHORE & JETTIES

POSSIBLE PROJECTS*	PRIORITY			TIME FRAME			PROBABLE COST			ACTION
	HIGH	MODERATE	LOW	SHORT	MEDIUM	LONG TERM	*HIGH	MODERATE	LOW	
1 Selective tree thinning to provide continuous foreshore open space and improve safety and connectivity.	H	M	L	S	M	L	H	M	L	To be investigated by Council.
2 Investigate opportunity to reinstate historical building structures on jetties.	H	M	L	S	M	L	H	M	L	To be investigated by Council.
3 Embellish existing Jetties (Lighting, bench seat, viewing platforms etc.)	H	M	L	S	M	L	H	M	L	Refer to Detail 3A.
4 New Public Park, food outlet and water play area at Watkins Jetty.	H	M	L	S	M	L	H	M	L	Refer to Detail 3B.
5 Event space along cycleway for linear festivals (eg. sculpture by the lake) to encourage use of foreshore.	H	M	L	S	M	L	H	M	L	To be investigated by Council.
6 Investigate Long Jetty Sailing Club Site as a commercial venue / youth club.	H	M	L	S	M	L	H	M	L	To be investigated by Council.
7 Signage connecting foreshore & main street.	H	M	L	S	M	L	H	M	L	Refer to Detail 3C.
8 Interpretive signage.	H	M	L	S	M	L	H	M	L	To be investigated by Council.
9 Stormwater pollutant traps and landscaped swales along foreshore.	H	M	L	S	M	L	H	M	L	Refer to Detail 3D. Detailed design documentation to be prepared.
10 Tuggerah Parade Upgrades.	H	M	L	S	M	L	H	M	L	To be investigated by Council.
11 Replace existing toilet blocks.	H	M	L	S	M	L	H	M	L	To be investigated by Council.
12 Renew Parrys Jetty	H	M	L	S	M	L	H	M	L	To be investigated by Council.
13 Linkage with Coast-to-Lake Walk	H	M	L	S	M	L	H	M	L	To be investigated by Council.
14 Reuse of Sea Scouts Hall	H	M	L	S	M	L	H	M	L	To be investigated by Council.

FIGURE 34. POSSIBLE PROJECT PRIORITISATION | PRECINCT C *Refer to Figure 15 for possible project locations. Note: Locations are indicative only.

PRECINCT C | LAKE FORESHORE & JETTIES

JETTY IMPROVEMENTS

In addition to existing general maintenance and improvement works being undertaken on Jetties, there is an opportunity to embellish existing jetties through lighting, seating and access to the water. (Refer to Detail 3A).

REINSTATE HISTORIC BUILDING STRUCTURES

Investigate opportunity to reinstate historical building structures on Watkins Jetty and Long Jetty.

OPEN LAWN AREA

Lawn area for passive activities.

LANDSCAPED SWALES

Proposed selective clearing of existing Casuarina species. Existing drainage lines to be replaced with landscaped swales to assist in filtering pollutants in stormwater. (Refer to Detail 3D).

TUGGERAH PARADE

Further improvements to Tuggerah Parade including formalisation of existing car parking areas, street tree planting and raised pedestrian crossings at Pacific Street and Thompson Street.



CONCRETE DETAIL

Proposed shot blast pattern in existing concrete cycleway for 250m to interpret the length of Watkins Jetty. Detail in the concrete will also assist in identifying the key activity node.

INTERPRETIVE WATER PLAY AREA

Potential water play area near Watkins Jetty. Water playground would form an interpretation of the lakes catchment to educate users on the importance of urban run off in the lake system. (Refer to Detail 3B).

SIGNAGE & INTERPRETIVE SIGNAGE

Proposed signage to assist with linking the foreshore with 'Urban Core' on The Entrance Road and providing history on the jetties and highlights special features of the estuary. (Refer to Detail 3C).

FIGURE 35. DETAIL PLAN - WATKINS JETTY FORESHORE NODE

DETAIL 3A | JETTY EMBELLISHMENTS

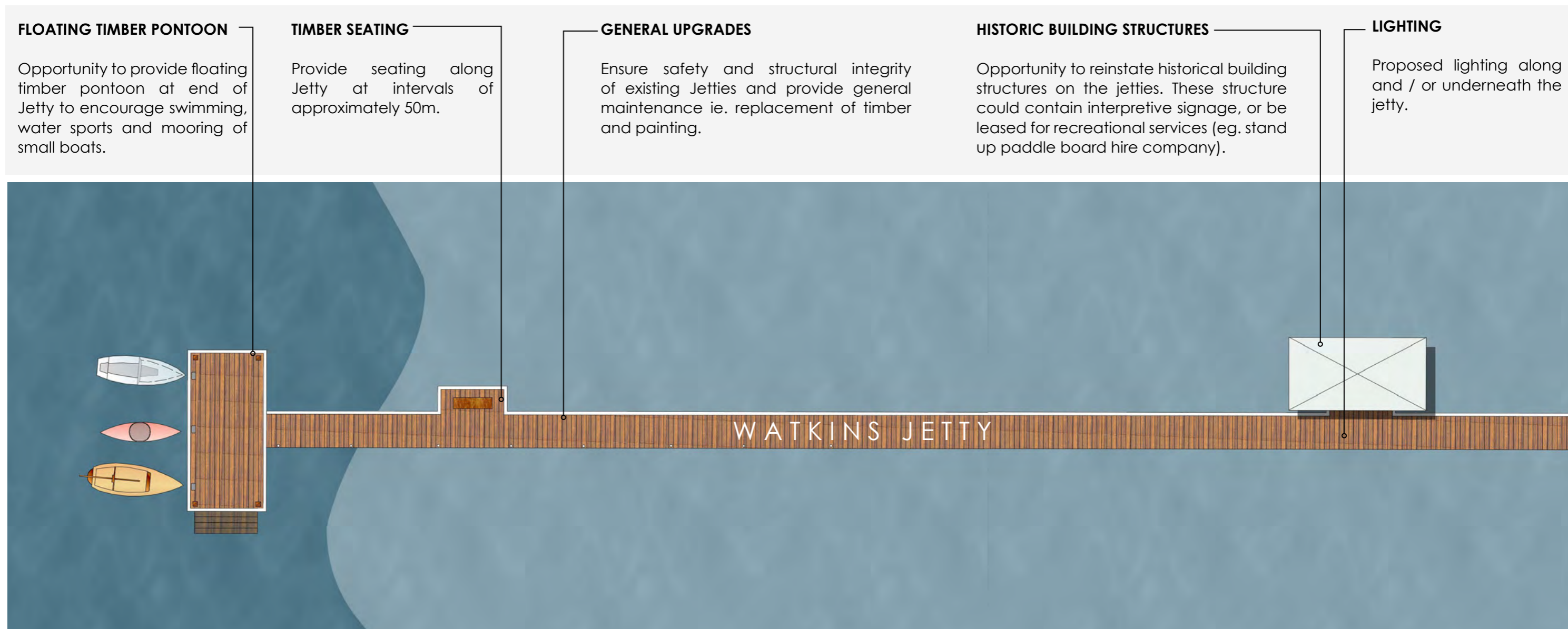
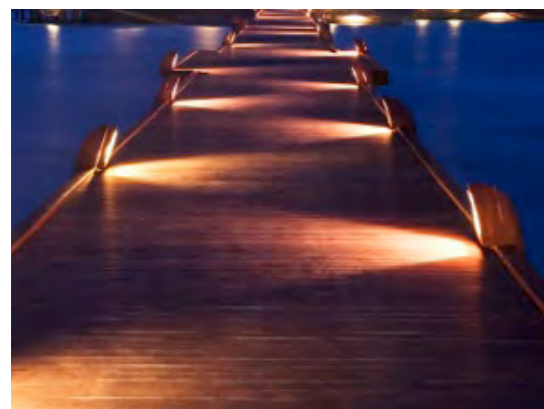


FIGURE 36. TYPICAL DETAIL - PROPOSED JETTY UPGRADES



Example of lighting along Jetty



Lighting under jetty



Floating timber pontoon example



Historical photographs showing jetty structures (Source: A History of Wyong Shire)



DETAIL 3B | WATKINS JETTY NODE



LANDSCAPED SWALES

Existing Casuarinas trees to be removed and replaced with native grasses. Refer to Detail 3D.

WATER PLAY AREA

Proposed water play area to educate users about the estuary management issues surrounding Tuggerah Lake. Play elements including water spouts, use recycled water. Formalised concrete play areas runs into an indicative creek line to interpret the journey of water through the catchment into Tuggerah Lake. Informative signage and games to be incorporated into the play area to suit a wide range of age groups.

EXISTING STRUCTURES

Existing structures to be retained and incorporated into the water play area to allow for surveillance.

TUGGERAH PARADE

Improve car parking along Tuggerah Parade to support proposed water playground.

SIGNAGE

Proposed signage to provide link to The Entrance Road. Refer to Detail 3C.

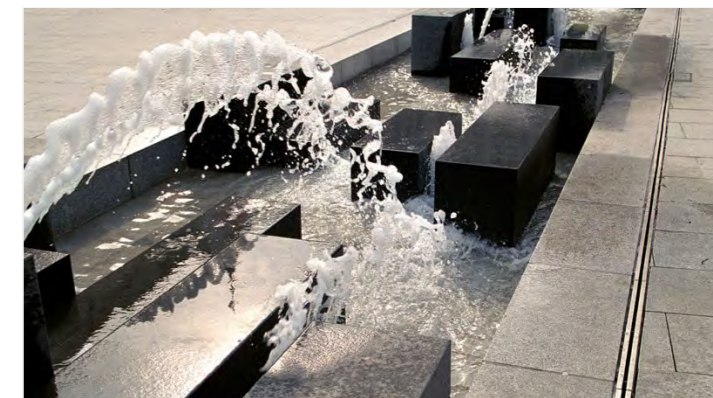


FIGURE 37. DETAIL PLAN - WATER PLAY AREA - WATKINS JETTY

DETAIL 3C | OPTION FOR FORESHORE SIGNAGE



FRONT OF SIGNAGE

Front of signage to face the foreshore cycleway providing information at each jetty. Signs are to provide a history of the jetties and their use in the 1800's and 1900's.

Information about the indigenous history of Long Jetty, and estuary management could be incorporated on the signs.

NOTE: This is an option only and is subject to Council's branding strategy.



REAR OF SIGNAGE

Rear of signage to face Tuggerah Parade to identify each Jetty.

Large steel lettering on the rear of the signage and the use of recycled materials including timber, corten steel and large bolts to interpret to the jetties.

FIGURE 38. PROPOSED SIGNAGE CONCEPT - FRONT VIEW

FIGURE 39. PROPOSED SIGNAGE CONCEPT - REAR VIEW



DETAIL 3D | LANDSCAPED SWALES

BACKGROUND NOTES:

Due to the highly developed nature of Long Jetty catchment, sediments, nutrients and litter pollute the Lake. There are limited opportunities to provide wetlands or bio-retention areas which are the types of treatment required for the removal of nutrients.

There is an opportunity to treat the storm water catchments along the Lake Foreshore Reserve. Existing Casuarina trees located along drainage lines along the Lake Foreshore Reserve were planted as part of the Lakes Improvement Program in the early 1990s. These Casuarinas tend to have a very invasive nature and generally do not assist in the removal of nutrients and pollutants in the stormwater.

RECOMMENDATIONS:

- Remove existing trees to improve solar access, maintenance access and amenity.
- Provide rock lining and native grasses along drainage channels to assist in the removal of nutrients from the stormwater.
- Gross Pollutant Traps be installed at the following Streets to catch litter and some sediment before it reaches the Lake.

1. Lake Street
2. Venice Street
3. Gladston Avenue
4. Surf Street
5. Elsiemer Street
6. Thompson Street
7. Pacific Street

SWALE

Replace existing Casuarina trees with native grasses and rock lining to open sight lines along the foreshore and assist in the removal of nutrients and sediment.

TIMBER BRIDGE

Proposed timber bridge to provide safe access across swales.

OPEN SPACE

Open space areas adjoining swales.

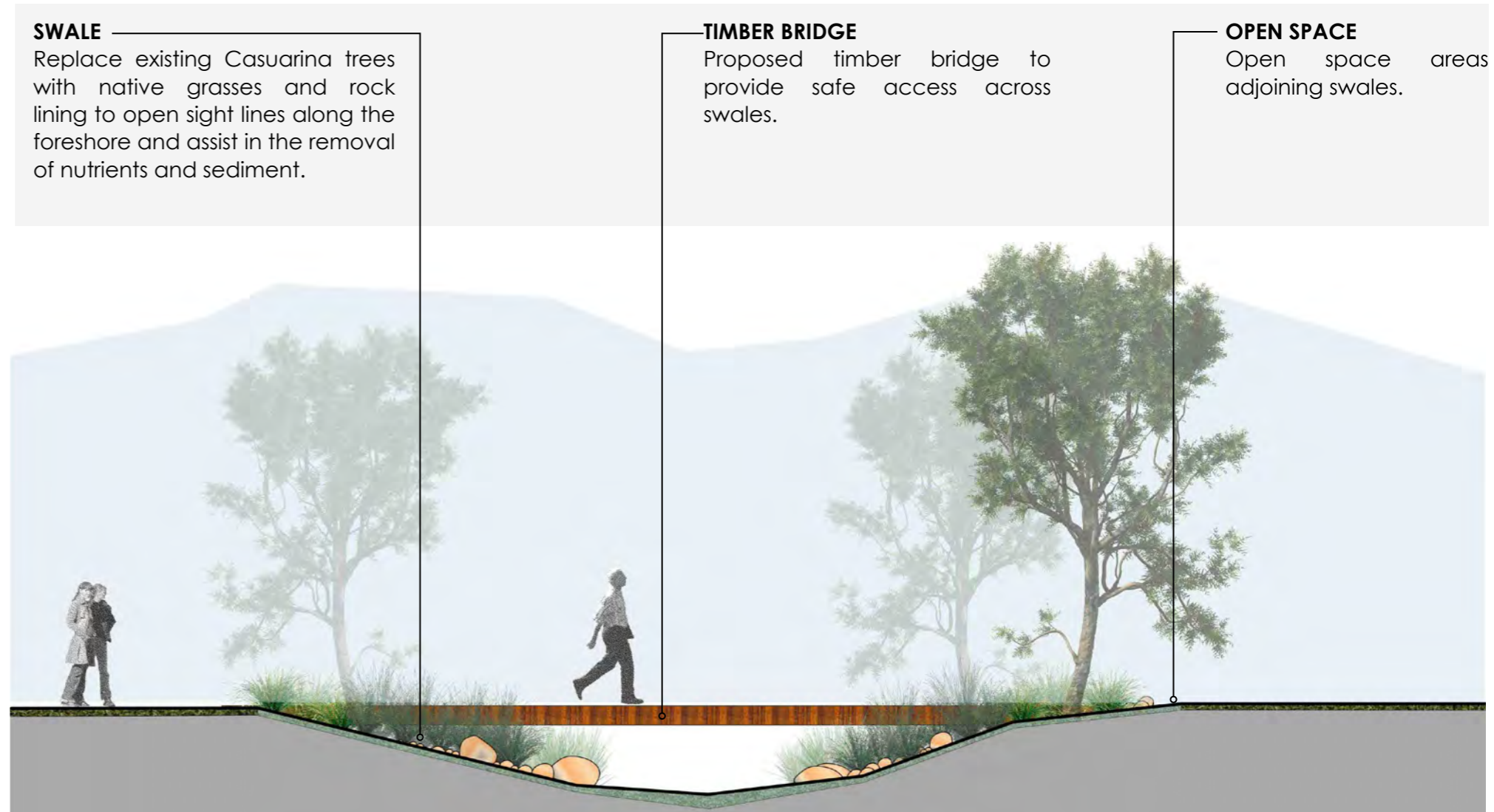


FIGURE 40. TYPICAL LANDSCAPED SWALE



Existing Casuarina Trees along Foreshore Reserve



Limited ground covers where Casuarinas dominate drainage channels.



Example of Gross Pollutant Trap

5.5 POSSIBLE PROJECTS | PRECINCT D | SOUTHERN PRECINCT

POSSIBLE PROJECTS*	PRIORITY			TIME FRAME			PROBABLE COST			ACTION
	HIGH	MODERATE	LOW	SHORT	MEDIUM	LONG TERM	* HIGH	MODERATE	LOW	
1 Provide urban planting and landscaping along The Entrance Road to unify southern precinct.	H	M	L	S	M	L	H	M	L	Refer to Detail 4A.
2 Investigate options to improve carparking along side streets.	H	M	L	S	M	L	H	M	L	To be investigated by Council.
3 Define southern gateway through built form.	H	M	L	S	M	L	H	M	L	To be investigated by Council.
4 Street tree planting along side streets (Lake Road and Minto Avenue)	H	M	L	S	M	L	H	M	L	To be investigated by Council.
5 Promote hub for Information Technology industries supported by the newly installed NBN.	H	M	L	S	M	L	H	M	L	To be investigated by Council.
6 Consolidate advertising and other signage to reduce visual clutter.	H	M	L	S	M	L	H	M	L	To be investigated by Council.
7 Formalise road treatment along side streets.	H	M	L	S	M	L	H	M	L	To be investigated by Council.

FIGURE 41. POSSIBLE PROJECT PRIORITISATION | PRECINCT D

*Refer to Figure 17 for possible project locations.
Note: Locations are indicative only.

DETAIL 4A | DETAIL PLAN - SOUTHERN PRECINCT



SIDE STREET CAR PARKING

New line markings on Side Streets (Minto Avenue and Lake Street) and signage to identify car parking spaces.

STREET TREE PLANTING

Investigate the potential to incorporate street tree planting along Lake Road and Minto Avenue to encourage pedestrian access to lake foreshore.

ROAD BLISTER UPGRADES

Proposed planting and pavement to provide safe pedestrian access across Lake Street.

STREET TREE PLANTING

Investigate the potential to incorporate street tree planting along The Entrance Road.

NATIONAL BROADBAND NETWORK

Installation of NBN due for completion end of 2013.

URBAN LANDSCAPING

Provide landscaping to compliment existing streetscape improvement works (Concrete bollards and flag pole banners) on corner of McLachlan Avenue.



Urban landscaping



Street tree planting - Local Roads



Road blister planting

FIGURE 42. TYPICAL DETAIL - SOUTHERN PRECINCT