

# 2 Introduction

The **Urban Design & Landscape Plan (UDLP)** has been prepared to meet the requirements of the Ministers Conditions of Approval and ARTC's Statement of Commitments (refer to separate appendix).

In accordance with the Conditions of Approval the UDLP must be prepared in consultation with the various local councils, RailCorp and other relevant stakeholders including community liaison. At the conclusion of this process the UDLP is to be endorsed by the Director General of the NSW Department of Planning, prior to the commencement of construction.

The design themes of the UDLP are based on the parameters that were established in the preparation of the Environmental Assessment (and Environmental Impact Statement) and in response to the Submissions Report.

## 2.1 Scope of this UDLP

In accordance with the Conditions of Approval, the UDLP will consider the following matters;

- Details of materials, finishes, colour schemes and graffiti and vandal control for all new buildings, walls, barriers and fences;
- Location and design of station precincts (of affected stations only) including the designs for footpaths, "kiss 'n' ride" facilities, street furniture, lighting and public transport amenities;
- Landscape treatment and street tree planting to ensure any new structures integrate with the surrounding streetscape and screen the rail corridor as identified in the Environmental Assessment;
- Design detail that is sympathetic to the amenity and character of each of the local areas, especially in response to heritage items (indigenous and non-indigenous) and existing typologies, urban form and view corridors; and
- Opportunities for public art to be further developed by local artists through other NSW state government agencies.

Previous documentation prepared for this project by Parsons Brinkerhoff (preparation of the *Environmental Assessment Report, Heritage Assessment, Construction Environmental Management Plan* and *Biodiversity Management Sub Plan*) and more recently by Aurecon (Engineering Design and Parking Arrangement) has been reviewed as a part of the UDLP, and has been incorporated to identify where improvements can be made to the project in terms of;

- Urban and Landscape Design;
- Maintenance and Longevity; and
- Construction Cost.

The improvements detailed within this UDLP are consistent with the Conditions of Approval, Statement of Commitments and the Environmental Assessment. These improvements are described in detail within each of the relevant sections of this document for the approval of the determining authorities.

The following strategic and management plans have also been considered in the development of the UDLP (refer to Table 2.1):

- Leacock Regional Park Draft Plan of Management (2007);
- Georges River Corridor: Plan of Management and Master Plan (2002); and
- Draft Liverpool City Centre Plan (2006).

The UDLP is divided into the following sections:

- **Section 3 - Scope of Work:** - This section describes the general scope of the works required between Sefton and Macarthur and identifies the critical areas of Urban Design and Landscape treatment;
- **Section 4 - Built Elements:** - This section deals with all of the built elements along the Southern Sydney Freight Line.
  - 4.1 Station Precincts, that includes proposed plans and information on Sefton, Cabramatta, Warwick Farm, Casula, Minto, and Leumeah.
  - 4.2 Noise Walls and Retaining Walls, including site specific locations.
  - 4.3 Bridges and abutments, including site specific locations.
 All sections include information on materials and finishes.
- **Section 5 - Landscape Design:** - The landscape design focuses on various planting treatments along the rail corridor including the selection of relevant and appropriate species for each of the geographical areas through which the SSFL travels. It also details appropriate landscape design for embankments, screening, integration and rehabilitation with parks and other sensitive areas. The specific sites are dealt with separately in Section 5.2.
- **Section 6 - Maintenance:** - This section describes the Urban Design and Landscape maintenance and management plans.

In addition the report includes the following schedules:

- **Schedule 1 - Community Consultation Table**
- **Schedule 2 - Environmental Assessment (Table 3.2)**
- **Schedule 3 - Aboricultural Assessment - Sefton Train Station - Hills Fig**

## 2.2 General Design Objectives and Themes

### 2.2.1 Objectives

The objective of this Landscape and Urban Design & Landscape Plan can be described as:

- To improve the physical and aesthetic amenity of the Rail Corridor for residents and the local community;
- To create a sense of design unity and consistency that reinforces, improves and extends the social, physical and environmental character of the line;
- To implement Urban Design and Landscape design improvements that are cost effective and suitable to the environment and have ongoing low maintenance demands;
- To create opportunities for the local communities to interact and contribute to the final built infrastructure where possible and practical;
- To reflect the specific local identity of communities in and around the station precincts; and
- To enhance and maintain the area's unique environment and biodiversity.

In addition to these objectives, Table 3.2 of the Environmental Assessment outlined a series of key urban and landscape design guidelines and principles. These guidelines have been reviewed and incorporated into the UDLP. Refer to Schedule 4 for details.

### 2.2.2 Design Themes

In fulfilling the requirements of these general design objectives, the design has adopted several design considerations and principles. These principles make reference to the:

- Local built typology and natural topography;
- Various parks and reserves located along the rail corridor; and
- History and heritage of station precincts.

By sensitively referencing the local context, it will enable the generation of urban design and landscape elements that are appropriate to the region.

The main design concepts explored in the UDLP are as follows:

*Stitching across the line:* while the rail corridor has existed for over 120 years, local communities are fragmented by the rail corridor through suburbs and town centres. A recurring theme throughout the length of the line is the need to connect across the line. This is most evident at town centres and within park areas.

*Modulated interfaces:* along the length of the line are a range of walls, screens and structures which offer a visual modulation of the rail line and its visibility from outside the rail corridor.

*Varying frames of reference:* The edges of the new SSFL are seen from within and without. Some vistas are from close quarters others are from a distance. These altered frames of references are acknowledged within the design with an assortment of images, textures and colours connecting to each place.

2.2.3 Safety in design

Generally, the station designs have been prepared in accordance with RailCorp’s Station Design Guidelines and the Ministry of Transport Guidelines for Bus Interchanges.

In particular, the *Disability Standards for Accessible Public Transport* (DSAPT) have been incorporated into the design of the stations and interchanges. A DSAPT compliance assessment has been prepared by Caldis Cook Architects on behalf of ARTC. It details compliance with these standards at all stations and station precincts.

Through the design development of these precincts and station building extensions, the design adheres to all aspects of:

- Accessibility, including the design of lighting, walkways, ramps, kerb ramps, pavement and tactile indicators in accordance with all relevant standards, codes and council’s requirements;
- Crime prevention measures, including the level of lighting (especially for Closed Circuit Television CCTV cameras), placement of CCTV around stations, design of visually linked places and the prevention of hidden dark spaces;
- Material selection, including hard and robust finishes that minimise the effects of vandalism. Walls are to be painted to simplify maintenance and cleaning;
- Landscaping, including the use of landscaping will avoid the creation of unsafe areas or hinder the effective use of CCTV cameras;
- Colour, including ensuring colour selection will not adversely impact on the legibility of traffic signs or rail signals; and
- All relevant standards and codes including RailCorp, Australian Standards, and *Disability Standards for Accessible Public Transport*.

Table 2.1: Relevant Strategic and Management Plans

Strategic and Management Plans		
Key Issues and Opportunities		Consideration in the UDLP
<b>Georges River Corridor: Plan of Management and Master Plan (2002)</b>		
The <i>Georges River Corridor: Plan of Management and Master Plan</i> (2002) identifies the following key issues and opportunities for the Georges River Corridor (pp 37-8).		
Key Issues & Opportunities - Access:	Isolation of riverside parklands: There is an opportunity to further extend Liverpool rail station concourse to Lighthorse Park. Such a connection would significantly improve accessibility of the parkland from Liverpool CBD and would represent a major advance in reconnecting Liverpool with its river.	Construction of the SSFL will not preclude the extension of the Liverpool rail station concourse to Lighthorse Park and the Georges River foreshore (refer to Section 3.2, Sheet 6 of the UDLP).
	Casula Powerhouse and new parklands: There is an opportunity to integrate access to Casula Powerhouse with proposed access for the new parkland (former gold course). This could enable a new riverside drive connecting Liverpool CBD and Casula Powerhouse via an upgraded parklands system.	The SSFL UDLP includes a new access road between Shepherd Street and Casula Powerhouse Arts Centre (refer to Section 3.2, Sheet 7 of the UDLP).
Key Issues & Opportunities - Environment:	Landfill at Lighthorse Park: There is an opportunity to integrate landfill remediation measures within future improvements to Lighthorse Park.	Construction of the SSFL does not impact on this opportunity.
	Bank Erosion: There is an opportunity to develop a small riverside park in this location (Atkinson Street); integrating RiverWalk access, stormwater outlet and bank stabilisation measures.	Construction of the SSFL will not preclude the development of a small riverside park at the end of Atkinson Street.
	There is an opportunity to implement bank stabilisation measures with the provision of pedestrian access along the foreshore.	This is provided for the 610 metres of shared cycleway / walkway adjacent to the Casula Access road.
	Bushland Quality: There is an opportunity to: <ul style="list-style-type: none"> <li>• integrate bushland management / rehabilitation through replication of native endemic plant communities in the riparian zone; and</li> <li>• reinforce the Sydney Coastal River Flat Forest vegetation communities in tree plantings within the parkland corridor.</li> </ul>	The UDLP and ensuing landscape documentation incorporates the use of native endemic plant species to ensure that biodiversity is maintained throughout the Georges River Corridor.
Key Issues & Opportunities - Recreation Amenity and Visual Quality	Lack of quality and amenity: There is an opportunity to use Georges River Foreshore Improvement Program (and other funding sources) to generate improved public access, use and enjoyment of the river foreshore.	A new shared pedestrian and cyclist path is to be constructed between Shepherd Street and the Woodbrook underpass. This shared path will connect with existing paths to improve pedestrian and cyclist amenity along the Georges River corridor.
<b>Liverpool City Centre Vision (2006)</b>		
The 2006, Liverpool City Centre Vision articulates the following vision for the growth of the Liverpool city centre over the next 25 years.		
The vision for the Liverpool city centre:	Growing the city centre	This is not part of the UDLP scope.
	Building the city’s role in the knowledge economy	This is not part of the UDLP scope.
	Creating a living city	The living city will be enhanced by improved access as shown in the UDLP in Sections 3.3, Sheets 6, 7 and 8.
	Ensuring human scale active street edges	This not part of the UDLP scope.
	Protecting and conserving historic elements	The special heritage considerations are described in the UDLP in Section 4.4.
	Reconnecting the city centre to the Georges River	Construction of the SSFL does not impede the opportunity to provide a future link between Liverpool City Centre and Georges River.

Strategic and Management Plans		
Key Issues and Opportunities		Consideration in the UDLP
The vision for the Liverpool City Centre (cont.)	Strengthening the connection between the city and the health and education precinct	This connection is strengthened by the new access road to Liverpool Hospital; the new road bridge at Liverpool Hospital (Section 3.2, Sheet 6 and Section 4.2.7); and the new Casula Access road (Section 3.2, sheets 7 & 8).
	Celebrating the special character of Liverpool	The SSFL will link Liverpool to the Casula Powerhouse Arts Centre by a new access road (refer to Section 3.2, Sheet 7 of the UDLP).
	Improving the quality of the public domain	ARTC and Liverpool City Council have agreed on station urban precinct plans (Warwick Farm and Casula) and vegetation landscape plans that will improve the quality of the public domain (UDLP Sections 4.1.3; 4.1.4; 5.2.2; 5.2.3; 5.2.4; and 5.2.5)
	Improving the quality of new buildings	This is not part of the scope of the UDLP.
	Consolidation of the City Centre	This is not part of the scope of the UDLP.
	Enhancing pedestrian networks	The shared cycleway / walkway adjacent to the new Casula Access road will enhance these networks (UDLP Sections 3.2, Sheet 7).
	Improving the natural environment	ARTC and Liverpool City Council have agreed on vegetation landscape plans that will improve the natural environment (UDLP Sections 5.2.2; 5.2.3; 5.2.4; and 5.2.5).
<b>Leacock Regional Park Draft Plan of Management (2007)</b>		
The Leacock Regional Park Draft Plan of Management was prepared by the NSW National Parks and Wildlife Services under the requirements of the National Parks and Wildlife Act 1974. It outlines a summary of the significance and specific objectives of the Leacock Regional Park.		
Summary of Significance	Provision of a regional open space supplying informal recreational opportunities in a growing urban area.	The UDLP provides advice on its relationship and consistency with the CEMP's Biodiversity Management Sub Plan, including in the vicinity of Leacock Regional Park (UDLP Section 3.2, Sheet 8 and Section 5.2.5). The vegetation offset package being finalised between ARTC and DECCW will enhance Leacock Regional Park.
	Important native animal habitat and a wildlife movement corridor.	As above
	Protection of endangered ecological communities listed under the <i>Threatened Species Conservation Act 1995</i> (TSC Act).	As above
	Protection of habitat for threatened animal species listed under the TSC Act.	As above
	Protection of archaeological remains that document both indigenous and non-indigenous settlement and use of the region.	-
	Protection of native plant associations that are characteristic of the sandstone plateau and the transition between vegetation communities on Wianamatta shale and the sandstone plateau.	As above
	Provision of an educational resource.	-
	Protection of the upper catchment of Glenfield Creek.	As above
Specific objectives for Leacock Regional Park	To promote the awareness and significance of Endangered Ecological Communities and conservation principles within Leacock Regional Park.	-
	To promote the development of recreation opportunities within the existing Park and the provide for sustainable development of recreational opportunities for the local community.	As above
	To promote and encourage the educational significance of the features of Leacock Regional Park through the provision of educational activities.	-