

33 Visual analysis

33.1 Introduction

A visual assessment is a structured analysis of the existing landscape character and scenic quality of a study area against which the visual effects of a proposed development are assessed.

The visual assessment carried out for the Port Wakefield Road Upgrade has helped to ensure that any negative effects will be reduced, eliminated or mitigated where possible.

33.2 Visual assessment methodology

The methodology used to assess the visual effect of the Port Wakefield Road Upgrade is similar to that described in Section 18. However, the assessment focused on the landscape character immediately around each of the major intersection upgrades and around the Salisbury Highway interchange rather than assessing broader landscape character areas along Port Wakefield Road.

33.3 Existing visual environment

33.3.1 General context

Port Wakefield Road Upgrade is located towards the western edge of the Northern Adelaide Plains visual catchment and is oriented in a north–south direction.

33.3.2 Landform and land use

The terrain is typically flat with the road rising approximately 6 m over a 12 km length from the Salisbury Highway to the interface with the Expressway.

Abutting land use on Port Wakefield Road consists of agricultural, residential, industrial, recreational and open space/recreation. From the north and to the west lies horticultural land in Waterloo Corner, the Bolivar Wastewater Treatment Plant, Highway One Caravan and Tourist Park, the Globe Derby community and trotting track and the Cheetham salt extraction works at Dry Creek. The Bolivar Wastewater Treatment Plant has a buffer of trees and agricultural land between the plant and Port Wakefield Road. Several residential suburbs lie to the east of Port Wakefield Road. The road crosses three main watercourses including Dry Creek, Little Para River and Helps Road drain. Wetlands are located along the Little Para River and around the Salisbury Highway interchange.

33.3.3 Views and landmarks

Long distance views to the Mount Lofty Ranges are possible from many locations along Port Wakefield Road. Immediately north of the Salisbury Highway interchange, the Cheetham salt extraction works provide interesting visual character while to the south the wetlands provide an important area of bird habitat and are a well-known landscape feature.

33.3.4 Landscape character and scenic quality

Port Wakefield Road is highly urbanised with a mix of residential, commercial and industrial land uses contributing to an eclectic landscape character. The local road network generally forms a grid pattern of sealed and unsealed roads that link the arterial roads and the surrounding communities. The vegetated corridor of the Little Para River and the constructed wetlands provide important areas of natural green space.

Port Wakefield Road and its immediate environs are generally considered to be of low to moderate scenic quality. The mix of land use and associated visual clutter (e.g. signage, fencing, light poles, transmission lines and patchy vegetation) contribute to this poor quality visual environment.

33.4 Effects of the project on the existing environment

The visual assessment for Port Wakefield Road Upgrade concentrated on the proposed locations for intersection upgrades and the Salisbury Highway interchange. An assessment of the existing environment, a summary of the effects the project will create, and measures proposed to minimise effects within each area are outlined in Table 33.1. Detailed descriptions of each area, photographs of the area, the effects and proposed mitigation measures are provided in the *Urban Design, Landscape and Visual Assessment Technical Paper*.

Table 33.1

Landscape character areas, effects and mitigation measures along Port Wakefield Road

Landscape character area	Landscape character	Scenic quality and visual sensitivity	Proposed changes, effects and measures to minimise effects
Waterloo Corner Road	Land use is residential and commercial. An old go-kart track, a small area of revegetation and an informal grassed swale are the main character features of the area.	Scenic quality: low This area is not sensitive to visual change.	Upgrade to traffic signals at Waterloo Corner Road and construction of turning lanes near St Kilda Road would have little effect on the existing visual environment. Some vegetation removal will be necessary in the median, but trees will be planted nearby to replace those removed.
Bolivar Road	Surrounding land use includes a service station, caravan and tourist park and new residential area.	Scenic quality: moderate This area is moderately sensitive to visual change because of the close proximity to residential areas.	Upgrade to existing traffic signals and increased intersection capacity will have little effect on the existing visual environment although some median vegetation may be lost. Vegetation will be planted nearby to replace that which is removed.
Ryans Road	Residential area north of Ryans Road. Large transmission lines cross Port Wakefield Road. Plant nursery is surrounded by a dense screen of vegetation which screens views to the Mount Lofty Ranges.	Scenic quality: low Residential area located along the existing service road is moderately sensitive to visual change.	New traffic signals will be installed at Ryans Road and an upgrade to the existing service road would improve visual amenity for local residents.
Salisbury Highway interchange	Views across pink salt crystallisation pans to white mounds of salt provide an interesting visual feature on the western side of Port Wakefield Road. On the eastern side, wetlands provide a green buffer and significant habitat for fauna species.	Scenic quality: moderate–high There are no private dwellings in this area, so the area is not sensitive to visual change.	No change in its appearance for road users given no major modifications are proposed.

33.5 Environmental management

33.5.1 Principles adopted to minimise effects

The Northern Expressway *Urban Design, Landscape and Visual Assessment Technical Paper* establishes a series of design objectives and principles that will be used to develop design solutions to minimise negative visual effects and enhance visual opportunities. Measures to minimise effects at specific locations are detailed above in Table 33.1 while general environmental management principles are detailed below.

Measures to minimise effects during planning and design

Mitigation measures proposed to reduce visual effects include ensuring replacement plantings are visually integrated with land use and existing vegetation patterns along the corridor.

Measures to minimise effects during construction

The visual effect of the works on Port Wakefield Road will be greatest during and immediately following construction, with the visual effect decreasing as the landscape plantings mature and as people become accustomed to the visual changes that have occurred.

Mitigation measures to minimise visual effects during construction include:

- retaining existing trees where possible to minimise the extent of visual change
- use of landmark trees and massed low plantings to reinforce the intersection of the proposed Northern Expressway with Port Wakefield Road and to provide an improved visual amenity in this area
- installing directional lighting at intersections to minimise the effect of street lighting on residential properties.

Measures to minimise effects post-construction

Mitigation measures to minimise visual effects post-construction include:

- ongoing maintenance of the landscape plantings within the road reserve to ensure plant growth and to control weeds.

33.6 Conclusion

The proposed Port Wakefield Road Upgrade will have a minor effect on the existing visual environment, and in many cases the upgrade will improve visual amenity. This will occur by formalising intersections and service roads and through the landscape rehabilitation works that will occur after construction works have been completed.

The Urban Design Framework is integral to all project phases including concept design, detailed design and construction. By integrating the intersection upgrades into the existing landscape, providing an interesting journey experience, addressing sustainability issues and providing structures of good visual quality, any negative visual effects of the project will be minimised.

