

MR182 - BRIDGE STREET, WINDSOR
REPLACEMENT OF WINDSOR BRIDGE
URBAN DESIGN AND LANDSCAPE
CONCEPT REPORT
(INCLUDING LANDSCAPE CHARACTER AND VISUAL
IMPACT ASSESSMENT)

OCTOBER 2012



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EXECUTIVE SUMMARY

BACKGROUND

This report presents the urban design and landscape concept and landscape character and visual impact assessment for the Windsor bridge replacement project and is incorporated as a working paper in the Environmental Impact Statement (EIS) for this project (Windsor Bridge Replacement, Environmental Impact Statement, SKM).

Windsor is located on the Hawkesbury River in the north western part of the Sydney metropolitan area. Windsor is an attractive and historic town located on a ridgeline adjacent to the southern foreshore of the Hawkesbury River. The river which is a significant feature in this landscape, is about 150 metres wide and forms a long reach roughly 2.5 kilometres in length adjacent to the town.

Windsor is the third principal settlement of the early colony, officially founded soon after Sydney and Parramatta in 1795. As the earliest settlement in the area and one of the 'Macquarie towns' which were laid out by Governor Macquarie in 1810, Windsor has a high level of heritage significance.

Windsor has been the site of river access and crossings for the district since the establishment of the town, when it was then known as Green Hills. The Windsor bridge was constructed in 1874 to replace the punt which had provided access from the town to the northern foreshore. Windsor bridge is the oldest existing structure still in use for crossing the Hawkesbury River and is considered to be a rare item listed on the Section 170 NSW State Agency register, relating to its initial construction, its subsequent modifications and survival.

The current approach road from Windsor to the bridge cuts through Thompson Square, an historic place dedicated as public space by Governor Macquarie in 1810. Thompson Square has recognised heritage significance at a state level as one of the oldest surviving public squares in Australia. Although formalised in 1810 by Governor Macquarie, it was being used as a public space as early as 1794, just 6 years after the founding of the colony of Sydney.

As the bridge is now approaching the end of its economic life, Roads and Maritime Services (RMS) is seeking approval to construct a replacement bridge around 35 metres downstream of the existing bridge. The replacement bridge and its approach roads are likely to impact on the heritage, urban and landscape values of the area. This report describes the proposed bridge replacement concept and the measures that have been incorporated into the concept in order to ameliorate some of these impacts. The report also presents an assessment of potential landscape character and visual impacts that are likely to occur should the project proceed.

REPORT CONTEXT

This report has been prepared in response to the environmental assessment requirements issued by the Director General of the Department of Planning. The Environmental Assessment Requirements (DGRs) for the visual amenity, urban design and landscape aspects of this project, as set out under key issues of application number SSI-4951, are noted as follows;

A description of the visual significance of the bridge surrounds, Thompson Square, river foreshore and landscape setting, and an assessment of the visual impact of the project on the landscape and urban design character of the area, including built form (materials and finishes), urban design (height, bulk and scale), views to and from Thompson Square, the town centre and river foreshore areas, and design details such as lighting, balustrades and street furniture.;

The overshadowing impact of the bridge on the public domain, including open space, parks and reserves, river foreshore areas, and Thompson Square, and adjoining residential/commercial uses; and

The landscape and urban design objectives for the reinstatement and rehabilitation of Thompson Square, taking into account Council's desired future landscape and urban design character of this locality. The EIS details must include:

Details of landscaping treatment and integration with the public domain and historic values of Thompson Square and surrounds, in particular the integration of the existing road corridor with Thompson Square and the new bridge alignment and approach roads, and

Details of integration of the bridge and Thompson Square with existing and future pedestrian and cycle networks, including design and safety measures for pedestrian and cycle access on the bridge.

THE PROJECT

The project would comprise the following works (as described in Windsor Bridge Replacement, Environmental Impact Statement, Chapter 5 - Description of the Project, SKM):

- Construction of a replacement bridge over the Hawkesbury River at Windsor, around 35 metres downstream of the existing Windsor bridge.
- Reconstruction and upgrading of existing intersections and bridge approach roads to accommodate the replacement bridge, including:
 - Removal of the existing roundabout and installation of traffic signals at the intersection of George and Bridge Streets.
 - Construction of a new dual lane roundabout at the intersection of Freemans Reach Road, Wilberforce Road, northern bridge approach road and the access road to Macquarie Park. All roads serviced by the new roundabout would require minor realignments.
 - Realignment of the southern and northern bridge approach roads. The new southern bridge approach road would generally follow the alignment of Old Bridge Street along the eastern side of Thompson Square. The northern bridge approach road would be a new road connecting the bridge to the new dual lane roundabout.
- Construction of a shared pedestrian/cycle pathway for access to and across the replacement bridge.
- Removal of the existing bridge approach roads and then backfilling, rehabilitating and landscaping these areas.
- Demolition of the existing Windsor Bridge including piers and abutments.
- Landscaping works within Thompson Square parkland and adjacent to the northern intersection of Bridge Street, Wilberforce Road, Freemans Reach Road and the access road to Macquarie Park.
- Redevelopment of part of The Terrace to provide continuous access along the southern bank of the river and under the replacement bridge to Windsor Wharf.
- Construction of scour protection works on the southern and northern banks and around three bridge piers.
- Construction of a permanent water quality basin to capture and treat stormwater runoff from the bridge and northern intersection prior to stormwater being discharged to the Hawkesbury River.

- Architectural treatments for noise mitigation, as required, where feasible and reasonable and in agreement with affected property owners.
- Ancillary works including:
 - Adjustment, relocation and/or protection of utilities and services, as required.
 - Construction and operation of temporary construction, stockpiling and compound sites.

In addition to the above-listed work elements, early works for further identification, salvage, recording and protection of Aboriginal and non-Aboriginal heritage, would be carried out as part of impact mitigation for the project. These early works would include:

- Salvage excavation at identified Aboriginal heritage sites on the southern bank of the river in accordance with the procedures identified in the Aboriginal heritage chapter of the Environmental Impact Statement for the project.
- Recording and protection of historic heritage in accordance with the procedures identified in the historic heritage chapter of the Environmental Impact Statement for the project.

URBAN DESIGN, BRIDGE AND LANDSCAPE OBJECTIVES

A series of project objectives and principles have been devised to guide the development of the concept design outcome for the project. These objectives were formulated with consideration of Hawkesbury City Council's vision and objectives for Thompson Square as part of their foreshores Plan of Management. The objectives and principles have been divided into general urban design and landscape elements and bridge architecture elements. The objectives for these two categories are outlined below;

Urban design and landscape

Objective 1: Develop an integrated concept design that fits sensitively with the existing qualities and characteristics of Windsor and its Hawkesbury River setting.

Objective 2: Enhance the existing amenity, visual character and cultural landscapes of Thompson Square and Windsor.

Objective 3: Maintain the integrity of cultural and historic buildings, structures, elements and spaces of Windsor.

Objective 4: Improve connectivity for vehicles, pedestrians and cyclists.

Bridge Architecture

Objective 1: Design a bridge and approaches that are well sited and considered in relationship to the Hawkesbury River's landscape setting, the township of Windsor, the banks, parks and approach roads.

Objective 2: Design the new bridge in alignment, gradient and its constituent elements so that it has a dignified and confident presence.

Objective 3: The deck of the bridge should be expressed as an uncluttered horizontal plane spanning the Hawkesbury River.

Objective 4: The deck soffit should be designed, treated and finished as an important facade, due to its high visibility from the public domain.

Objective 5: The piers should express, through their structure, the forces that are transferred from deck to the foundations.

Objective 6: The abutments should seamlessly resolve the transition from elevated deck to the ground plane, and be fully considered as a three dimensional design.

Objective 7: All materials should be selected for their robustness and durability, considering their tendencies to develop a patina as they age gracefully.

Objective 8: Lighting should be an integral part of the design, rather than an unrelated attachment.

URBAN DESIGN, BRIDGE AND LANDSCAPE CONCEPT

The urban design, bridge and landscape concept has been developed based on the objectives and principles outlined above, in order to achieve an integrated concept design for the project. There are a number of key aspects of the project which are reflected in the urban design, bridge and landscape concept as follows:

- The proposed bridge would be configured to accommodate two lanes of traffic in opposite directions with the capacity to increase to a three lane configuration in the future.

- A shared path for pedestrians and cyclists would be constructed on the upstream side of the bridge providing safer and more accessible connections between the Windsor township and Macquarie Park.
- Traffic signals at the George Street and Bridge Street intersection would facilitate safer vehicular, pedestrian and cyclist movements through the intersection.
- The existing bridge approach road through Thompson Square (Bridge Street) would be removed creating a unified area of parkland within the square.
- The Terrace along the river foreshore would be reconnected providing a continuous link from Windsor Wharf to the upstream parkland areas.
- The unified open space in Thompson Square would provide enhanced physical and visual linkages between George Street and the river foreshore.
- The Thompson Square parkland area and the river foreshore, adjacent to The Terrace, would be designed to facilitate improved access and cater for a wider range of recreational activities.
- The existing northern approach road, between the existing bridge abutment and the Wilberforce Road and Freemans Reach Road intersection, would be removed and landscaped to blend with the adjoining parkland in Macquarie Park and also create a distinctive entry point to Windsor.
- Revegetation of the southern and northern foreshores would be undertaken, following the construction of a retaining wall and the placement of rock for scour protection of the river bank.
- The urban design, bridge and landscape concept is depicted in the plans, elevations and cross sections within the body of this report.

LANDSCAPE CHARACTER AND VISUAL IMPACT ASSESSMENT

Road infrastructure projects cause a range of impacts on both natural and cultural environments while providing a wide range of tangible transport and development benefits to the local and wider community. The Windsor bridge replacement project is no exception. Whilst the replacement of the existing, 138 year old bridge has arisen due to capacity, durability and maintenance considerations, the siting of a new bridge within the historic Windsor township, and particularly within the Thompson Square Conservation Area, is a complex and therefore challenging task.

Landscape character assessment

The landscape character assessment of the proposed works described represents a qualitative assessment based on three landscape character zones (1)Thompson Square, (2) Hawkesbury River and River Banks and (3) Wilberforce Road and Freemans Reach Road Intersection. The impacts on landscape character have been assessed as being high for Thompson Square and the Hawkesbury River and River Banks, and high to moderate for the Wilberforce Road and Freemans Reach Road Intersection landscape character zone.

Overall, the proposed works would have an adverse impact on landscape character. While the works replace an existing bridge and upgrade existing road infrastructure, they would cause adverse impact on all landscape character zones due to the scale of the works and to its historic setting, its value to the community and its sensitivity to change. The existing bridge is a Section 170 listed heritage item and sits comfortably within the scale of the landscape. The replacement bridge is of a greater scale than the existing bridge, and the bridge deck sits between 3.0 to 5.0 metres higher than the existing bridge. These changes, and the introduction of a new bridge abutment would have an impact on the scale and layout of Thompson Square. The infilling of the cutting on Bridge Street, however, would provide the opportunity to reconnect the square with the river, creating a larger and more regular shaped parkland area. The scale of the two lane roundabout on the northern foreshore is also substantially larger than the current intersection configuration.

Whilst the scale of the proposed works would represent substantial adverse changes within highly valued and sensitive settings, some improvements would result from the concept design. For example, the removal of the current Bridge Street alignment from the middle of Thompson Square would substantially improve the form and character of the parkland space, creating a more unified and usable space, and improve pedestrian connectivity between the town centre and the river foreshore as reflected in Council's Plan of Management.

Visual impact assessment

A total of 18 viewpoints form the basis of the visual impact assessment. The viewpoints are focused across the range of anticipated magnitudes and sensitivities, providing a more even ratings outcome.

Out of the 18 selected viewpoints, visual impact ratings were determined as follows:

- Five viewpoints would have High visual impact.
- Five viewpoints would have High to Moderate visual impact.
- Four viewpoints would have Moderate visual impact.
- Two viewpoints would have Moderate to Low visual impact.
- Two viewpoints would have Low visual impact.

Ratings of high impact occur in the open space areas in close proximity to the Hawkesbury River and around Thompson Square where the sensitivity to change is the highest. High to moderate impacts were recorded around the upper areas of Thompson Square, due to the high sensitivity to change combined with the moderate magnitude of the proposed works. Moderate impacts were recorded in some foreshore open space areas, and agricultural areas where views to the proposed works are distant or partially screened by vegetation. Low to moderate and low impacts occur in areas of low magnitude, for example, views from George Street and the commercial area of Bridge Street.

Landscape and urban design mitigation strategies have been developed from the outcomes of the landscape character and visual impact assessments, in order to assist in the mitigation of any potential impacts and for further consideration and design development during the next detail design phase of the project.

OVERSHADOWING

The greatest overshadowing impacts would be experienced on the southern foreshore due to the height, width and length of the approach road, abutment and proposed bridge deck over The Terrace and the foreshore. The overshadowing of these areas is likely to affect users' experience, depending on the time of day and the season, however these affects are tempered by the use of these spaces for short term circulation, rather than for longer term passive recreational uses. The increased pedestrian and cycle activity generated in part, by the improved access created when Bridge Street is removed from Thompson Square, will be subject to some overshadowing, but this is not considered to be a significant problem.

Some overshadowing impacts would occur on the northern foreshore although these would be limited to a relatively confined area along the foreshore and only affect passing pedestrians and cyclists for a relatively short period of time.

Overshadowing would occur on the river however it would be unlikely to impact any activities occurring on the water.

CONCLUSION

Whilst this concept design and EIS focuses on the primary area for the proposed works relating to the replacement of the Windsor bridge, there are a range of opportunities to enhance the integration of the project into this sensitive place in Windsor. Due to the high sensitivity of the study area, it will be necessary to involve a wide range of stakeholders including State government agencies, Hawkesbury City Council and the community, to ensure that the final design for the project and associated works achieves the best possible outcome and the highest level of stakeholder support.

The new bridge and its approach roads would increase the dominance of this infrastructure in the area and have a substantial impact on the local environment of both Thompson Square and the river foreshores. It's increased height and width, compared to the existing bridge and approach roads, increases the bulk and scale of the road infrastructure in this highly sensitive setting.

While the square was designated as a public place for more utilitarian functions, it has gradually assumed an important role as a setting for civic and recreational functions over time, and has the potential to increase this role in Windsor, particularly as access to and along the river foreshore improves for cultural and recreational activities.

Hawkesbury City Council and the community have indicated their desire to see Thompson Square and adjoining public domain along George Street and the river foreshore develop to assume this cultural and recreational role with a series of plans and reports which have recommended improvements. As these improvements are made in adjoining areas, the imperative for the enhancement of Thompson Square to facilitate civic and recreational activities increases.

The Windsor bridge replacement project would improve the visual and physical access between the square and the river foreshore by infilling the Bridge Street

Continued on next page

cutting and reshaping the landform to create a more regular grassed slope connecting George Street to The Terrace. In addition, connections to Macquarie Park, an important recreational destination on the northern foreshore, will be easier and safer for pedestrians and cyclists making this area more accessible and better integrated into the township of Windsor.

The replacement bridge would improve the arterial road and local access functions for the local community and a wider regional community by providing improved safety, traffic efficiency and flood immunity for motorists, cyclists and pedestrians. In addition to these benefits, it is recommended that this project be used as a catalyst for further improvement to enhance the public domain character and functionality within and beyond Thompson Square.

The opportunities identified in this report, together with the results of the proposed consultation process regarding the design of Thompson Square would form a valuable basis for both State and Local government agencies to embark on a comprehensive and collaborative design process which embraces the improved integration of the Windsor bridge replacement project into the wider area, incorporating Thompson Square and the adjoining streetscape, the river foreshore and Macquarie Park. The challenge for this project is to achieve a coordinated outcome which delivers the best possible enhancements for Windsor and particularly Thompson Square, one of the most historically important public spaces in Australia.

I INTRODUCTION

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1.1 OVERVIEW

The Roads and Maritime Services (RMS) is proposing to construct a new bridge across the Hawkesbury River at Windsor to replace the existing bridge that has reached the end of its economic life. To support the design and approval of the Windsor bridge replacement, RMS is preparing an Environmental Impact Statement (EIS) under Part 5.1 of the *Environmental Planning and Assessment Act 1979*.

This Urban Design and Landscape Concept Report has been prepared by Spackman Mossop Michaels (SMM) and Hill Thalys (HT) and is a Technical Paper that supports the Environmental Impact Statement (EIS) being prepared by Sinclair Knight Merz (SKM). SMM and HT have worked on this project in conjunction with the RMS Centre for Urban Design, other RMS specialist advisors, and road and bridge designers from SKM.

1.2 BACKGROUND

Windsor bridge is the oldest existing structure still in use on the Hawkesbury River section of the Hawkesbury Nepean River. The bridge was opened in 1874, consisting of a timber deck and cast iron piers. Parts of the bridge are now 137 years old. The bridge is 143 metres long and 6.1 metres wide. It carries an average of 19,000 vehicles per day.

In 2009, RMS prepared a community update describing nine potential options to rehabilitate or replace the existing bridge, and this was followed up with the preparation of an Options Report which summarised the relative impacts of these options. Option one was identified as the preferred option based on value for money, and because it satisfied most of the project objectives.

RMS is now undertaking detailed surveys and assessments as part of the EIS and development of the concept design for the replacement bridge.

1.3 DESCRIPTION OF THE PROJECT

The project would comprise the following works (as described in Windsor Bridge Replacement, Environmental Impact Statement, Chapter 5 - Description of the Project, SKM):

- Construction of a replacement bridge over the Hawkesbury River at Windsor; around 35 metres downstream of the existing Windsor bridge.
- Reconstruction and upgrading of existing intersections and bridge approach roads to accommodate the replacement bridge, including:
 - Removal of the existing roundabout and installation of traffic signals at the intersection of George and Bridge Streets.
 - Construction of a new dual lane roundabout at the intersection of Freemans Reach Road, Wilberforce Road, northern bridge approach road and the access road to Macquarie Park. All roads serviced by the new roundabout would require minor realignments.
 - Realignment of the southern and northern bridge approach roads. The new southern bridge approach road would generally follow the alignment of Old Bridge Street along the eastern side of Thompson Square. The northern bridge approach road would be a new road connecting the bridge to the new dual lane roundabout.
- Construction of a shared pedestrian/cycle pathway for access to and across the replacement bridge.
- Removal of the existing bridge approach roads and then backfilling, rehabilitating and landscaping these areas.
- Demolition of the existing Windsor Bridge including piers and abutments.
- Landscaping works within Thompson Square parkland and adjacent to the northern intersection of Bridge Street, Wilberforce Road, Freemans Reach Road and the access road to Macquarie Park.
- Redevelopment of part of The Terrace to provide continuous access along the southern bank of the river and under the replacement bridge to Windsor Wharf.
- Construction of scour protection works on the southern and northern banks and around three bridge piers.

- Construction of a permanent water quality basin to capture and treat stormwater runoff from the bridge and northern intersection prior to stormwater being discharged to the Hawkesbury River.
- Architectural treatments for noise mitigation, as required, where feasible and reasonable and in agreement with affected property owners.
- Ancillary works including:
 - Adjustment, relocation and/or protection of utilities and services, as required.
 - Construction and operation of temporary construction, stockpiling and compound sites.

In addition to the above-listed work elements, early works for further identification, salvage, recording and protection of Aboriginal and non-Aboriginal heritage, would be carried out as part of impact mitigation for the project. These early works would include:

- Salvage excavation at identified Aboriginal heritage sites on the southern bank of the river in accordance with the procedures identified in the Aboriginal heritage chapter of the Environmental Impact Statement for the project.
- Recording and protection of historic heritage in accordance with the procedures identified in the historic heritage chapter of the Environmental Impact Statement for the project.

I.4 SCOPE OF THIS REPORT

This report presents the urban design and landscape concept for the project and adjoining public domain areas.

The project objectives are:

- To improve safety for motorists, pedestrians and cyclists.
- To improve traffic and transport efficiency.
- To improve the level of flood immunity.
- To meet community needs for the long term.
- To minimise the impact on the heritage and character of the local area.
- To be cost effective and an affordable outcome.

The purpose of this report is to facilitate an integrated urban design and engineering design outcome for the project, through an understanding of the context of the project within Windsor itself. An extensive review of the regional and local context of Windsor, local and site analysis, and an assessment of impact of the project is presented in order to identify and summarise the visual and landscape character opportunities and issues within the study area. The concept design for the project has been formulated through the development of an urban design strategy which proposes to avoid or mitigate potential impacts wherever possible.

I.5 DIRECTOR GENERALS REQUIREMENTS

The Director General's Environmental Assessment Requirements (DGRs) for the visual amenity, urban design and landscape aspects of this project as set out under key issues of application number SS1-4951, are noted as follows;

Table 1.1: DIRECTOR GENERAL'S REQUIREMENTS.

KEY ISSUE	REPORT REFERENCE
<i>A description of the visual significance of the bridge surrounds, Thompson Square, river foreshore and landscape setting,</i>	Chapter 2 & 3
<i>and an assessment of the visual impact of the project on the landscape and urban design character of the area, including built form (materials and finishes), urban design (height, bulk and scale), views to and from Thompson Square, the town centre and river foreshore areas,</i>	Chapter 7 Chapter 5 (materials and finishes)
<i>and design details such as lighting, balustrades and street furniture.</i>	Chapter 6
<i>The overshadowing impact of the bridge on the public domain, including open space, parks and reserves, river foreshore areas, and Thompson Square, and adjoining residential/commercial uses; and</i>	Chapter 7 (in particular Section 7.4)
<i>The landscape and urban design objectives for the reinstatement and rehabilitation of Thompson Square, taking into account Council's desired future landscape and urban design character of this locality. The EIS details must include:</i> <ul style="list-style-type: none">• <i>Details of landscaping treatment and integration with the public domain and historic values of Thompson Square and surrounds, in particular the integration of the existing road corridor with Thompson Square and the new bridge alignment and approach roads, and</i>• <i>Details of integration of the bridge and Thompson Square with existing and future pedestrian and cycle networks, including design and safety measures for pedestrian and cycle access on the bridge.</i>	Chapter 5 Chapter 6 & 7 Chapter 6

Note: Refer to the traffic and transport working paper for more detail on the integration of the existing and future pedestrian and cyclist networks into the surrounding area.

I.6 CONCEPT DESIGN STUDY METHOD

The preparation of this study follows RMS guidelines (refer to Section 1.9) and included an integrated team design and assessment process which has included consultation with agencies and the local community. The undertaking of the impact assessment and the finalisation of the concept design has been an iterative process which has enabled the concepts to be refined as they were developed, thereby reducing and mitigating the potential impacts wherever possible.

The study is summarised as follows:

- Undertaking site visit's and field investigations, reviewing relevant literature, analysing aerial photographs, topographic maps to understand the study area.
- Reviewing the initial engineering concept design and supporting material to gain an appreciation of the project.
- Defining urban and landscape character through a contextual analysis.
- Identifying and describing landscape character zones and evaluating the project's impact on them.
- Identifying the visual catchment of the project.
- Selecting viewpoints within the visual catchment representing a range of different land uses.
- Evaluating the project's visual impact by comparing the sensitivity of viewpoints and the magnitude of the impact of the upgrade upon them.
- Identifying urban design and landscape strategies in order to mitigate adverse impacts.
- Development of the concept design.
- Summary recommendations and conclusions for further consideration in the future detailed design phase of the project.

I.7 STUDY TEAM

The study team for this project comprised an integrated team of consultants in association with the RMS including:

- **Client:** Roads and Maritime Services (RMS) including the disciplines of engineering, environmental assessment, heritage and urban design.
- **Engineering, biodiversity and noise assessment:** Sinclair Knight Merz (SKM) including road design, bridge design and environmental assessment.
- **Urban design and landscape and visual assessment:** Spackman Mossop Michaels (SMM).
- **Bridge architecture:** Hill Thalys (HT).
- **Heritage:** Biosis Research Pty Ltd.
- **Aboriginal Heritage:** Kelleher Nightingale Consulting Pty Ltd.
- **Maritime Archaeology:** Cosmos Archaeology.

I.8 REPORT STRUCTURE

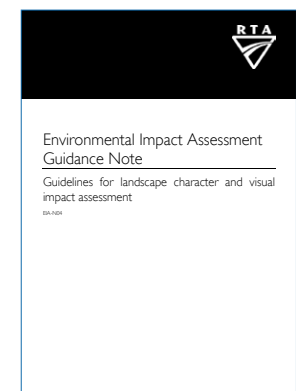
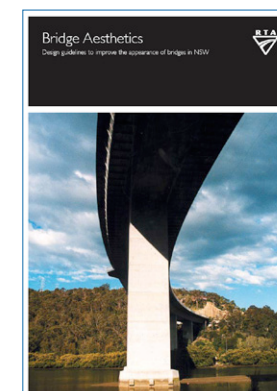
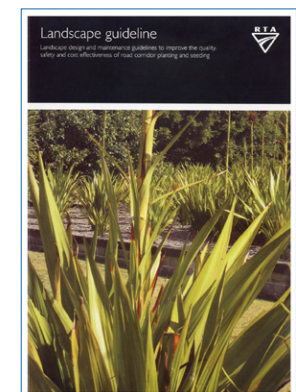
This report is structured as follows:

- **Chapter 1:** Introduction - introduces the project and outlines the scope and study team.
- **Chapter 2:** The Existing Context of Windsor - a description and illustration of the environmental and cultural factors of the local area.
- **Chapter 3:** Significance of Place - a description and analysis of the study area including opportunities and constraints.
- **Chapter 4:** The Project - a summary of the key engineering works.
- **Chapter 5:** Urban Design, Bridge and Landscape Strategy - urban design objectives and principles, along with bridge design and the design of urban and landscape elements.
- **Chapter 6:** Urban Design, Bridge and Landscape Concept - illustration of the concept design in graphic format including plans, cross sections and details.
- **Chapter 7:** Assessment of Impact - landscape character and visual impact assessment including a summary of mitigation measures undertaken and further mitigation measures which are to be undertaken in the future.
- **Chapter 8:** Conclusions and Recommendations - a summary including agreed team decisions in the design process and next steps.

I.9 RMS GUIDELINE DOCUMENTS

RMS have produced a comprehensive list of design guideline documents aimed at achieving good urban design outcomes. This report has been undertaken with reference to the following published documents:

- Beyond the Pavement (RMS, 2009).
- Landscape Guideline (RMS, 2008).
- Bridge Aesthetics (RMS, 2004).
- Environmental Impact Assessment Guidance Note, Guidelines for Landscape Character and Visual Impact Assessment (RMS, 2008).



I.10 STRATEGIC POLICY CONTEXT

The desired future character of the study area is drawn from an analysis of the existing character of the foreshore areas of Windsor that comprise the study area, and consideration of the strategic planning documents relevant to the project. These include:

- Draft North West Sub-regional Strategy 2007.
- Hawkesbury Community Strategic Plan 2010-2030.
- Hawkesbury Residential Lands Strategy.
- Hawkesbury Local Environmental Plan 1989.
- Hawkesbury City Council Generic Plans of Management for Community Lands.
- Plan of Management for the Windsor Foreshore Parks - Incorporating the Great River Walk.

Appendix B provides a more detailed consideration of each document and the relevance of objectives and key actions to the project.

The Plan of Management for the Windsor Foreshore Parks is of particular relevance and identifies the following vision statement:

“Creating and managing a foreshore open space corridor in Windsor that provides a valuable resource for recreation, cultural engagement and identity to the community both local and metropolitan, and that pursues sustainable best practice environmental management that contributes to the health of the broader river catchment system.”

These desired improvements to the foreshore corridor; cultural engagement and river health, as well as improvements to vehicular, cyclist and pedestrian access within and through Windsor identified in other strategic planning documents, designed in a way that is sympathetic to existing valued heritage and cultural qualities and characteristics, form the desired character of the study area.