NAMBUCCA VALLEY COUNCIL

BRIDGES SERVICE LEVEL POLICY NO: ES 08

Our Vision

Nambucca Valley ~ Living at its best

Our Mission Statement

'The Nambucca Valley will value and protect its natural environment, maintain its assets and infrastructure and develop opportunities for its people.'

1.0 Purpose

As the Local Government Authority, Nambucca Valley Council has determined the standard and guidelines for implementing sustainable bridge standards. Details of these standards and guidelines, to which Nambucca Valley Council will construct its bridge infrastructure, are defined within this policy.

2.0 Policy objective

To ensure that when bridges are constructed, a standard level of service is applied based on the following criteria:

- Access
- Usage
- Safety
- Maintenance
- Meeting legislative requirements
- Community expectation; and
- Affordability

3.0 Scope

This policy applies to Council bridge activities encompassing;

- design
- capital upgrade
- capital new

4.0 Related legislation

Local Government Act, (1993)

5.0 Related documents

AS 5100.1- 2017 Bridge Design Part 1: Scope and general principles

6.0 Policy statement

As the Local Government Authority the Nambucca Valley Council has determined the standard to which it will construct its bridge infrastructure.

In developing these levels of service, Council has considered community expectations, current service levels, the level of risk imposed and available resources. The current maintenance service levels being delivered are seen as being very close to reflecting the balance between customer expectations and financial affordability.

Details of these levels of service are defined within this policy and are outlined herewith;

6.0.1 AS 5100.1 Australian Standard Bridge Design states "road bridge carriageway widths shall be specified by the relevant authority based on consistent level of service along a section of the roadway…"

6.0.2 AS 5100.1 Australian Standard Bridge Design states "the performance level and barrier type requirements for each bridge or relevant site shall be determined by the relevant authority".

6.0.3 This policy of Council enables the modification to AS 5100.1

6.0.4 Council is committed to implementing a systematic asset management methodology in order to apply appropriate asset management best practices to Council's bridges. This includes ensuring that assets are planned, created, operated, maintained, renewed and disposed of in accordance with Council's priorities, levels of service, safety, and long term sustainability.

6.0.5 This policy facilitates the levels of service being matched with the community's ability, and willingness to pay

6.0.6 Council has an adopted Road Hierarchy Plan, with the following classifications:

- Class 1 rural local road, greater than 700vpd
- Class 2 rural local road, 200 - 700vpd
- Class 3 rural local road, 50 - 199vpd
- Class 4 rural local road, 10 - 49vpd
- Class 5 rural local road, less than 10vpd

Bridges shall assume the hierarchy classification of the road or pathway of which it is an integral part.

6.1 Bridge width principles

6.1.1 A single lane bridge (4.4m between barriers) shall be constructed on Class 3 and Class 4 roads (as per adopted Road Hierarchy Plan).

6.1.2 A dual lane bridge (7.2m between barriers) shall be constructed on Class 2 roads (as per adopted Road Hierarchy Plan).

6.1.3 A dual lane bridge (8.2m between barriers shall be constructed on Class1 roads (as per adopted Road Hierarchy Plan).

6.2 Bridge barriers principles

6.2.1 No barriers will be attached to Bridges on Class 4 roads

6.2.2 A low performance level barrier (Appendix 1) shall be attached to a Bridge on a Class 3 road if the height from the deck to the creek bed is higher than 3m

6.2.3 Australian Standard 5100.1 (Appendix B, p33) shall be used to determine traffic barrier performance levels for Class 1 and Class 2 roads

6.2.4 Low performance level barriers shall be constructed referencing the NSC standard drawing shown in Appendix 1.

6.2.5 Regular performance level barriers shall be constructed referencing the NSC standard drawing shown in Appendix 2.

7.0 Responsibility

Councillors are responsible for adopting the policy, allocation of resources, providing high level oversight of the delivery of the organisation's bridge replacement programme and maintaining accountability mechanisms to ensure that organisational resources are appropriately utilised to address the organisation's strategic plans and priorities.

The **General Manager** has overall responsibility for developing management strategies, plans and procedures and reporting on the status and effectiveness within Council.

8.0 History

8.0.1 A Draft Asset Management Plan (AMP) for Council's Bridge Assets was adopted by Council in 2010 and was based on a template developed by the Institute of Public Works Engineering Australia (IPWEA).
The adoption of asset management principles for Council's bridges is intended to assist Council in achieving its Strategic Longer-Term Plan and Long Term Financial objectives.
The AMP is a living document continually being refined as the data is sourced and validated.

8.0.2 Council owns more than 170 bridges comprising of assets in the following categories: concrete bridges, timber bridges, other bridges and major culverts

8.0.3 Levels of service have not been matched with the community's ability, and willingness to pay and the adoption of a policy will.

- demonstrate responsible management of bridge assets and services provided from assets;
- demonstrate compliance with regulatory requirements; and
- communicate funding required to provide the required levels of service

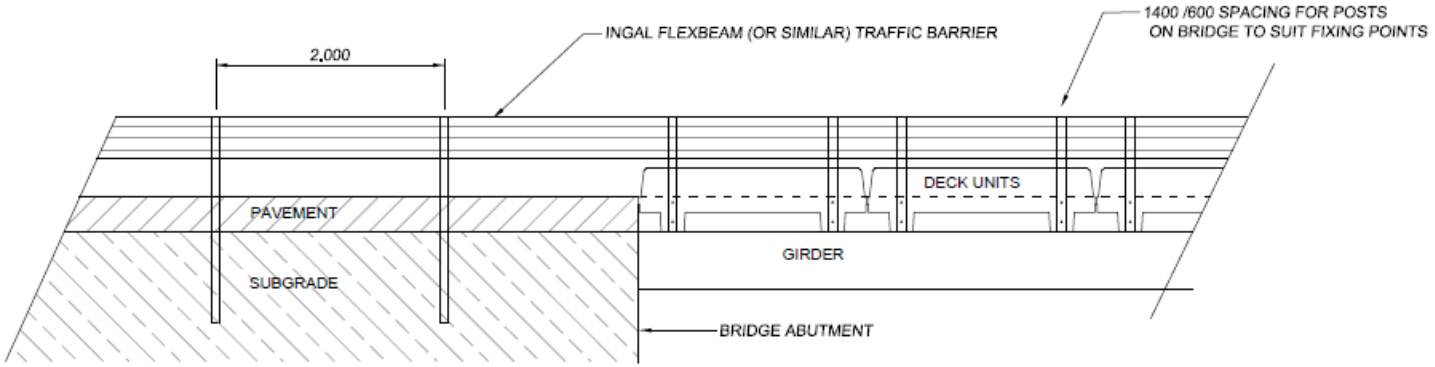
The asset management plan is to be read in conjunction with;

- Timber Bridge 5 Year Forward Plan;
- Council's 20 Year Community Strategic Plan;
- Infrastructure Management Plan; and
- Annual Budget.

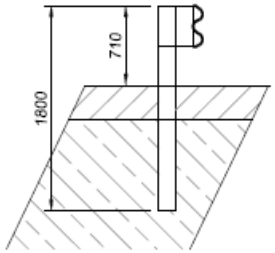
8.0.4 Nambucca Valley has a long history of damage to bridges due to flood water, and bridge barriers are frequently damaged by debris build-up on bridges prone to overtopping during periods of flooding.

Department:	Engineering Services	**Last Reviewed**	**Resolution Number**
Policy Category	Council	March 2018	78/18
Endorsed By:	General Manager		
Approval Authority	Council		
Policy Owner	AGMES		
Contact Officer	Manager Assets		
Document No.	13327/2014		
First Adopted	25 Sept 2014		
Resolution No:	473/14		
Review Date:	Feb 2022		

Appendix 1 – Low Performance Level Barrier



LOW PERFORMANCE LEVEL
BARRIER ELEVATION



LOW PERFORMANCE LEVEL
BARRIER SECTION THROUGH
BRIDGE APPROACH

LOW PERFORMANCE LEVEL
BARRIER SECTION THROUGH
BRIDGE DECK

			NAMBUCCA SHIRE COUNCIL				
			COMPUTER TRANSFORMATION N:\ccad\data\ACAD\STD DWG	SCALES		DRAWN S FOWLER	DRAWING LOW PERFORMANCE LEVEL BARRIER
A	MAY 14	STANDARD DETAIL				DRAFT S FOWLER	PROJECT BRIDGE BARRIER DETAILS STANDARD DRAWINGS - NSC
						DATE 9/5/2014	SECTION TECHNICAL SERVICES SHEET 1 OF 1

Appendix 2 – Regular Performance Level Barrier