

# JOB ROLE STATEMENT

## ENGINEER BRIDGE LOADING SPECIFIED CALLING - LEVEL 3

**DIRECTORATE** PLANNING AND TECHNICAL SERVICES      **POSITION NO** P0059341  
**BRANCH** STRUCTURES ENGINEERING

**KEY RESPONSIBILITIES**

Manage the bridge load-rating assessment and bridge crossing approval process for Over Size Over Mass (OSOM) vehicles and other moving heavy loads over the network of all bridges across Western Australia.

**KEY DELIVERIES**

**Bridge Rating**

- Undertake load rating of non-timber bridges and manage load rating of all bridges to determine safe load capacity.
- Review and update vehicle load ratings for all bridges and make recommendations on posting of load limits for under-strength bridge.
- Provide specialist technical advice to regions on requirements for bridge load limit postings and emergency repairs.
- Resolve and document repair solutions for bridges requiring load ratings improvements.
- Nominate design vehicle loadings for new bridge designs.
- Establish load rating methodology and review Design Summary Sheets.
- Review and assess proposals for the attachment/alteration of various services to existing bridges for the additional load applied to the bridges.
- Assess proposals for alteration/addition to existing structures above or adjacent to the Graham Farmer Freeway Tunnel.
- Contribute to the development and retention of specialist technical skills and expertise within the bridge rating and heavy loads management fields.

**Bridge Heavy Loads Movements**

- Investigate and approve bridge-crossing permits for heavy load movements routed over bridges.
- Assess and manage approval for network access period permits.
- Investigate and recommend concessional loading schemes for period permit operations that impact bridges.
- Prepare information and provide specialist technical advice to assist in policy direction affecting heavy haulage, including national freight guidelines and standards.

**Bridge Management System (BMS)**

- Manage the Heavy Loads Group records and databases within the Bridge Management System (BMS) and outside of BMS.
- Provide specialist technical advice for BMS Heavy Vehicles module including use, innovation, development, testing, implementation, training, and auditing.
- Prepare and update BMS user manual and interactive training manual for heavy load assessment.
- Review/investigate incidents in BMS Heavy Vehicle module, resolve issues and/or provide proper technical advice to assist in resolving incidents/issues.
- Review completed permit assessments within BMS to ensure consistency and accuracy of assessments.

**Leadership and Management**

- Manage human, financial, technological physical and other resources within agreed allocations to meet agreed outcomes.
- Manage employee behaviour, performance and development.

**Stakeholder Relationships**

- Liaise with and provide specialist technical advice to customers, the community, Local Government, national bodies such as Austroads and Standards Australia, and the road industry.

**SAFETY, HEALTH AND WELLBEING (SHW)**

Responsible for active participation and performance to SHW standards as detailed by the Main Roads' Safety, Health and Wellbeing (SHW) Management System - refer to "SHW Roles and Responsibilities Procedure" on 'iRoads' intranet.

**LOCATION**

Main Roads is a regionalised organisation with key delivery centres operating from the Kimberley to the Great Southern regions, including the metropolitan area. The incumbent of this position may be required to undertake a role in a region for a period of time.

**DYNAMIC RESOURCING**

The incumbent of the position may be required to perform any other role within the incumbent's level of skill, competence and responsibility as directed by the Managing Director of Main Roads to meet the organisation's objectives and the incumbent's development.

**REPORTING RELATIONSHIPS**

*This position reports to:*

(A) <b>TITLE AND LEVEL</b>		<b>POSITION NO</b>
STRUCTURES ASSET POLICY ENGINEER	LEVEL 4	P0061417
	SPECIFIED CALLING	

# ENGINEER BRIDGE LOADING SPECIFIED CALLING - LEVEL 3

**POSITIONS UNDER DIRECT SUPERVISION**

**ALL POSITIONS UNDER CONTROL**

List the position numbers, titles and levels of positions directly supervised

State number of positions only

TITLE and LEVEL	POSITION No	CATEGORY	NUMBER
Engineer	SC LEVEL 2	Salaried, Wages	1
Engineer	SC LEVEL 1		1
<b>TOTAL</b>			Up to 2

**SELECTION CRITERIA – SHOULD BE ADDRESSED IN THE CONTEXT OF THE ROLE**

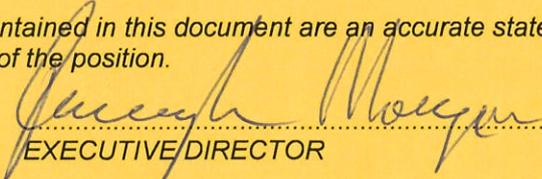
- A Degree in Civil or Structural Engineering.
- Substantial skill, knowledge and experience in:
  - bridge maintenance, design and analysis
  - bridge load rating for various bridge materials, structure types and live loads
  - structures and permits data analysis, identifying critical insights and recommending technical solutions to increase bridge durability and service life
  - management, development and implementation of structures inventory databases and bridge crossing permit assessment systems
  - building and enhancing stakeholder relationships
  - managing financial, technological, physical and other resources within agreed allocations to meet agreed outcomes
  - managing employee behaviour, performance and development
- Knowledge of:
  - assessment and management of heavy vehicles on bridges
  - providing technical advice in development, testing and maintenance of software
  - structural theory and properties of engineering materials used in bridge construction
  - policies and practices on Occupational Safety and Health, and on EEO, diversity and equity

**CERTIFICATION**

1. The details contained in this Job Role Statement have been reviewed and conform to Main Roads guidelines.

SIGNATURE  DATE 21/10/2020  
BRANCH/SECTION HEAD

2. The details contained in this document are an accurate statement of the duties, responsibilities and other requirements of the position.

SIGNATURE  DATE 21/10/20  
EXECUTIVE DIRECTOR

3. The details contained in this document have been reviewed and conform to Main Roads guidelines.

SIGNATURE  DATE 27/10/20  
MANAGER HR BUSINESS