

Mandurah Estuary Bridge Duplication

Sustainability Objectives and Targets

Table 1 Project Sustainability Objectives and Targets

Sustainability Objectives	Targets	Phase
Protect, enhance and integrate the existing uses of the Estuary 'place'.	Enhance the existing recreational facilities and connected path network within the project area for all-abilities users, by: <ul style="list-style-type: none"> implementing a new accessible fishing platform and associated fishing facilities; new accessible car park with six ACROD parking bays; and enhanced shared path network. Demonstrated through survey that 75 per cent of responders are satisfied the quality of place has been improved.	Design
	Improve existing recreational facilities through new playground and educational facilities, promoting the local environment.	Design & Construction
	Incorporate at least three pieces of public art into the Project incorporating themes that reflect the history, Aboriginal heritage, and/or environment of the local Mandurah Estuary area. Consult and incorporate input from Local Bindjareb Noongar people into all artwork reflecting Aboriginal culture. Create an additional seating node and collaborate with the Local Bindjareb Noongar people to enhance appreciation of the area.	Design
Protect and enhance the local environmental features.	Provide Marine Mammal Observer (MMO) monitoring data from the construction phase to local Mandurah Estuary research project.	Construction
	All plant species used for landscaping are indigenous species (endemics).	Design & Construction
	Provide permanent interpretative elements regarding the heritage and environmental value of the area, recognising Dolphins of the Peel-Harvey Estuary, the RAMSAR Wetland status and migratory birds, to enhance environmental awareness and appreciation.	Design

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Improve accessibility, capacity, connectivity, and safety for all users.	Increase eastbound morning peak hour median speed by 10 per cent compared to pre-construction traffic conditions.	Design
	Reduce crash frequency (rear and side swipes) within Project area compared to pre-construction crash statistics.	Design
	Undertake a permeability assessment and achieve an improved Link and Place (Jones & Boujenko, 2009) score, Movement and Place score or similar methodology, including facilitating safe path access to bus stop ID 27635 on the south side of Mandurah Road.	Design
Maximise business and employment opportunities for local communities.	At least 3.5 per cent project spend on materials sourced within 50km radius of MEBD.	Construction
	At least 3.5 per cent of contract value is awarded to registered Aboriginal businesses during construction phase.	Design & Construction
	Provide two local businesses within 50km radius of MEBD who have not completed MRWA works, ability to competitively tender, understand specifications and quality requirements, and successfully submit bid for works on the project.	Design & Construction
	At least 7 per cent of project value spend on businesses within a 50km radius of MEBD	Construction
	Keep navigational channel open for at least 95 per cent of the construction project program	Construction
Deliver a durable, resilient, low maintenance bridge that delivers value for money across all project phases.	Implement at least three opportunities to reduce maintenance compared to the existing Mandurah Estuary Bridge.	Design & Operation
	Identify and treat high climate and natural hazard risks and priority shocks and stresses within permanent design, to deliver a more resilient asset and associated infrastructure.	Design, Construction & Operation
	Design and install motion sensor lighting on the fishing platform and car park to reduce energy and emissions and light impacts to sensitive receptors.	Design & Operation
	Greater than 75 per cent of all stakeholders are satisfied that their input has influenced positive outcomes on the Project.	Design & Construction
	Beneficially re-use outputs on the Project: <ul style="list-style-type: none"> Casting bed formwork and launch nose/frame used for bridge launch is from previous project. Casting bed lifting beam from previous project. 	Design & Construction
	Achieve an Infrastructure Sustainability Council (ISC) Infrastructure Sustainability (IS) V2.1 Design and As Built Silver Rating	Design & Construction

Sustainability Objectives	Targets	Phase
<p>Deliver a high-quality outcome that is socially and environmentally sustainable and responds to the context and character of the area.</p>	Implement opportunities to optimise the use of materials on the Project and achieve a reduction in the environmental impacts of materials across design, construction and operational life of the asset, by a minimum of 10 per cent.	Design, Construction & Operation
	Implement opportunities to reduce energy use and emissions across design, construction and operational life of the asset, by a minimum of 10 per cent.	Design, Construction & Operation
	Implement opportunities to reduce water usage across design, construction and operational life of the asset, by a minimum of 10 per cent.	Design, Construction & Operation
	At least 85 per cent of all treated Acid Sulfate Soils (ASS) is diverted from landfill (including >50 per cent onsite reuse) in line with the DWER approved ASS Management Plan.	Design & Construction
	At least 85 per cent of all clean/inert material excavated is diverted from landfill (including >50 per cent onsite reuse of clean/inert excavation spoil).	Design & Construction
	At least 60 Per cent of all office resource outputs are diverted from landfill	Construction
	At least 70 per cent of all other inert resource outputs are diverted from landfill	Construction
	Greater than 70 per cent of all water used for construction purposes is recycled wastewater sourced from Halls Head Waste Water Treatment Plant.	Construction
	Minimise light pollution and impacts to sensitive receptors, demonstrated through no more than two horizontal lux level over the project boundary and two per cent upward light ratio (excluding decorative lighting).	Design, Construction & Operation
	<p>Minimise impacts of noise emissions to nearby receptors as a result of the Project:</p> <ul style="list-style-type: none"> No occurrences of piling while a dolphin is sighted within the exclusion zone (50m). Sensitive receptors are notified ahead of time of construction activities which may produce noise. Works during regular hours (Monday to Saturday, 7am to 7pm, excluding public holidays) will be undertaken as quiet as reasonably practical and in accordance with Section 4 of AS 2436-2010 Guide to noise and vibration control on construction, maintenance and demolition sites. Where out of hours construction works cannot comply with the assigned noise levels (as interpreted from the Noise Regulations), approval will be obtained from the City of Mandurah and sensitive receptors are notified of upcoming nightworks, noting the location and general timing. 	Construction

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	Minimise impacts to nearby receptors as a result of vibration generated by construction activities associated with the Project: <ul style="list-style-type: none"> Keep vibration levels produced by the construction works below five mm/s at the nearest sensitive receptor(s), as far as is reasonably practicable; and Close out all claims of damage as a result of vibration from the Project. 	Construction
	Achieve at least 10 per cent of total work hours undertaken by Local Aboriginal persons	Construction
	Achieve at least 10 per cent of women in the workforce	Construction
	Improve wellbeing for all employees on the Project including: <ul style="list-style-type: none"> Monitoring work hours, weekend hours and night shift hours. Creating a culture of wellness measured through team sentiment survey. Supporting physical health through at least one opportunity implemented for nutrition, exercise and sleep. 	Construction

Further information

The Mandurah Estuary Bridge Duplication project is delivering a second, two-lane bridge on the south side of the existing structure to provide additional traffic lanes. A new four-metre-wide shared path will also be built to help the local community better access recreational activities, including fishing. The \$136 million project is jointly funded by the Australian and Western Australian Governments.

To stay up to date with the latest project information, please visit www.mainroads.wa.gov.au/mebd, subscribe for project updates, or contact our Customer Information Centre on 138 138 or enquiries@mainroads.wa.gov.au.