# Newell and Mitchell Highways Intersection Upgrade

Review of Environmental Factors

Appendices A, B, C & E

Roads and Maritime Services | April 2019

Prepared by GHD Pty Ltd and Roads and Maritime Services

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# Appendix A

Consideration of clause 228(2) factors and matters of national environmental significance

# Clause 228(2) Checklist

In addition to the requirements of the *Is an EIS required?* guideline (DUAP 1995/1996) and the *Roads and Related Facilities EIS Guideline* (DUAP 1996) as detailed in the REF, the following factors, listed in clause 228(2) of the Environmental Planning and Assessment Regulation 2000, have also been considered to assess the likely impacts of the proposal on the natural and built environment.

Factor	Impact
a) Any environmental impact on a community? Construction of the proposal would result in short term noise impacts and minor traffic impacts to the local community for the duration of construction. Impacts would be minimised by the implementation of safeguards and management measures included in Section 7.2. The proposal would have no environmental impact on the community in the long-term and road users would benefit from improved traffic conditions including safety.	Short-term minor negative  Long-term positive
b) Any transformation of a locality? Construction of the proposal would result in some short-term transformation of the locality from a roadway to a construction site.  The proposal would not result in any substantial change to the locality as the works would be undertaken within an existing road corridor which would not be substantially altered as a result of the proposal. The locality would continue be dominated by the roadway with only some minor adjustment on how the intersection operations (ie traffic signals not roundabout).	Short-term minor negative  Long-term nil
c) Any environmental impact on the ecosystems of the locality? The proposal would result in minimal vegetation removal and therefore is not expected to impact on existing ecosystems.	Nil
<ul> <li>d) Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality?</li> <li>During construction, the proposal would result in a reduction in the aesthetic quality of the locality as a result of dust generation, noise, visual and traffic movements. These impacts would be mitigated with the implementation of safeguards and management measures located in Section 7.2. During operation of the new intersection the visual landscape is considered to be similar to the existing situation with the road to continue to operate as it currently does.</li> </ul>	Short-term minor negative  Long-term nil
e) Any effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations?  The proposal site does not contain any Aboriginal or non-Aboriginal heritage items and therefore would not result in any impacts on heritage.	Nil
<ul> <li>f) Any impact on the habitat of protected fauna (within the meaning of the National Parks and Wildlife Act 1974)?</li> <li>The proposal would not result in significant impacts on the habitat of any protected fauna due to the absence of significant habitat and the minor nature of works.</li> </ul>	Nil
<ul> <li>g) Any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air?</li> <li>The proposal would not endanger any species of animal, plant or other life form due to the lack of habitat and minor scale of work.</li> </ul>	Nil

Factor	Impact
h) Any long-term effects on the environment? The proposal would not result in any long-term impacts as the roadway would operate in a similar manner to the existing corridor (albeit with traffic signals and not a roundabout. Overall the proposal is considered to have a long-term benefit as it would improve traffic flows through the intersection which would provide travel time and safety benefits to the community.	Long-term positive
i) Any degradation of the quality of the environment? Construction would result in potential traffic, noise and air quality impacts. These impacts would be minimised through the implementation of safeguards and management measures summarised in Section 7.2. Construction activities have the potential to result in impacts to water quality as a result of pollutants such as sediment, soil nutrients, waste, and fuels and chemicals entering the stormwater system. Potential impacts to water quality would be managed with the implementation of controls provided in Section 7.2. The proposal is not considered to result in any long term degradation of the quality of the environment.	Short-term minor negative  Long-term nil
j) Any risk to the safety of the environment? During construction the safety of the environment would be reduced due to the existing roads remaining open throughout construction. Such impacts would be managed through traffic control management and any impacts are considered to be short-term in nature. During operation safety along the highways and at the intersection is considered to be improved.	Short-term minor negative  Long-term positive
k) Any reduction in the range of beneficial uses of the environment? During construction the proposal site would continue to operate as a roadway, however movements would be restricted due to the presence of construction activities. These impacts would be short-term in nature and minimised with the implementation of safeguards and management measures in Section 7.2. During operation there would be not reduction in the use of the road corridor.	Short-term minor negative  Long-term nil
I) Any pollution of the environment?  The proposal could potentially result in minor short-term water pollution from sediments, soil nutrients, waste, and spilt fuels and chemicals. Management of water quality impacts would be undertaken in accordance with the safeguards and management measures summarised in Section 7.2.  The proposal would result in minor short-term air pollution from plant and machinery and the generation of dust during construction. Management of air quality impacts would be undertaken in accordance with the safeguards and management measures summarised in Section 7.2.  During operation pollution is not expected to be different to the existing situation as the road would operate in a similar manner to the existing roadway. Some minor reduction in pollution may be experienced due to a reduction in congestion at the intersection.	Short-term minor negative  Long-term minor positive
m) Any environmental problems associated with the disposal of waste? The proposal would have limited waste streams which are all considered to be common for a road project and therefore their disposal is not considered to generate any problems. In the event any contamination is found in vicinity of the site, this would be appropriately classified and removed to a suitably licence facility.	Short-term minor negative

Factor	Impact
<ul> <li>n) Any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply?</li> <li>All resources required for the proposal are readily available and are not in short supply.</li> </ul>	Nil
<ul> <li>o) Any cumulative environmental effect with other existing or likely future activities?</li> <li>The proposal would be undertaken in parallel to a number of other road projects within the Dubbo urban area. Some cumulative impacts are considered likely however these are considered to be manageable through the implementation of safeguards and management measures in Section 7.2. Further discussion of cumulative impacts are outlined in Section 6.12.</li> <li>Long-term the cumulative impact of these projects would be beneficial to the community due to improve traffic particularly with the forecast increase in vehicle movements.</li> </ul>	Short-term minor negative  Long-term positive
<ul> <li>p) Any impact on coastal processes and coastal hazards, including those under projected climate change conditions?</li> <li>The proposal would not impact on coastal processes as the proposal site is not located on the coast.</li> </ul>	Nil

### Matters of National Environmental Significance

Under the environmental assessment provisions of the *Environment Protection and Biodiversity Conservation Act 1999*, the following matters of national environmental significance and impacts on Commonwealth land are required to be considered to assist in determining whether the proposal should be referred to the Australian Government Department of the Environment and Energy.

A referral is not required for proposed actions that may affect nationally listed threatened species, endangered ecological communities and migratory species. Impacts on these matters are still assessed as part of the REF in accordance with Australian Government significant impact criteria and taking into account relevant guidelines and policies.

Factor	Impact
a) Any impact on a World Heritage property? The proposal would not impact World Heritage properties as there are none located within one kilometre of the proposal site.	Nil
b) Any impact on a National Heritage place? The proposal would not impact National Heritage places, as there are none located within one kilometre of the proposal site.	Nil
c) Any impact on a wetland of international importance? The proposal would not impact wetlands of international importance as there are none located within one kilometre of the proposal site.	Nil
d) Any impact on a listed threatened species or communities? The proposal would not impact on any listed threatened species or communities as the proposal site does not contain any threatened species or communities.	Nil
e) Any impacts on listed migratory species? The proposal would not impact on any migratory species due to the lack of suitable habitat within the proposal site for these species.	Nil
f) Any impact on a Commonwealth marine area? The proposal would not impact on any Commonwealth marine area due to the proposals position inland away from any marine areas.	Nil
g) Does the proposal involve a nuclear action (including uranium mining)? The proposal would not involve a nuclear action.	Nil
h) Additionally, any impact (direct or indirect) on Commonwealth land? The proposal would not impact on any Commonwealth land as there is none located in close proximity to the proposal.	Nil

# Appendix B

Statutory consultation checklists

## Infrastructure SEPP

#### Council related infrastructure or services

Issue	Potential impact	Yes / No	If 'yes' consult with	ISEPP clause
Stormwater	Are the works likely to have a <i>substantial</i> impact on the stormwater management services which are provided by council?	Yes	Dubbo Regional Council	ISEPP cl.13(1)(a)
Traffic	Are the works likely to generate traffic to an extent that will <i>strain</i> the capacity of the existing road system in a local government area?	Yes	Dubbo Regional Council	ISEPP cl.13(1)(b)
Sewerage system	Will the works involve connection to a council owned sewerage system? If so, will this connection have a <i>substantial</i> impact on the capacity of any part of the system?	No	Dubbo Regional Council	ISEPP cl.13(1)(c)
Water usage	Will the works involve connection to a council owned water supply system? If so, will this require the use of a <i>substantial</i> volume of water?	No	Dubbo Regional Council	ISEPP cl.13(1)(d)
Temporary structures	Will the works involve the installation of a temporary structure on, or the enclosing of, a public place which is under local council management or control? If so, will this cause more than a <i>minor</i> or <i>inconsequential</i> disruption to pedestrian or vehicular flow?	No	Dubbo Regional Council	ISEPP cl.13(1)(e)
Road & footpath excavation	Will the works involve more than <i>minor</i> or <i>inconsequential</i> excavation of a road or adjacent footpath for which council is the roads authority and responsible for maintenance?	No	Dubbo Regional Council	ISEPP cl.13(1)(f)

#### Local heritage items

Issue	Potential impact	Yes / No	If 'yes' consult with	ISEPP clause
Local heritage	Is there is a local heritage item (that is not also a State heritage item) or a heritage conservation area in the study area for the works? If yes, does a heritage assessment indicate that the potential impacts to the heritage significance of the item/area are more than <i>minor</i> or <i>inconsequential?</i>	No	Dubbo Regional Council	ISEPP cl.14

#### Flood liable land

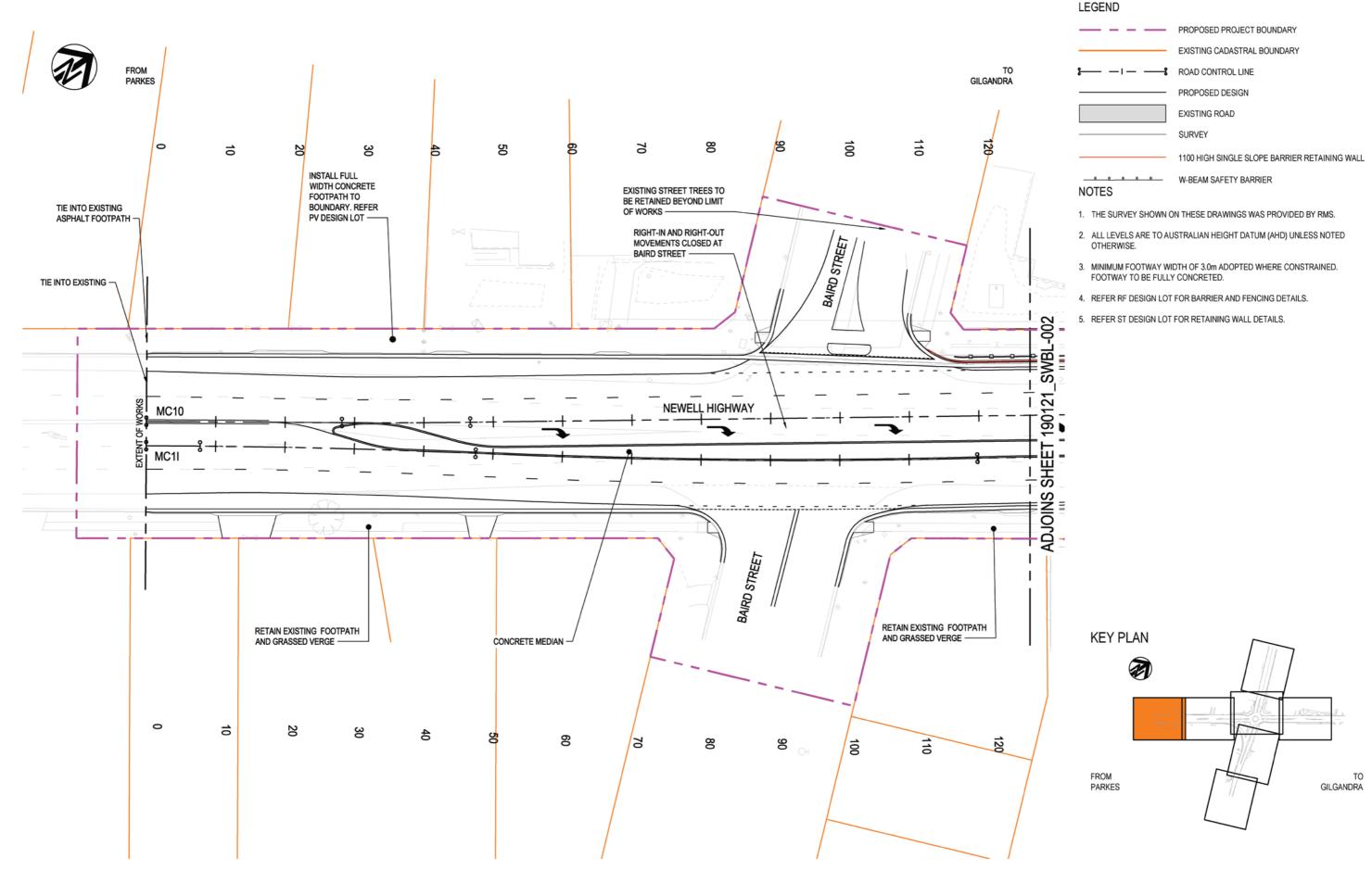
Issue	Potential impact	Yes / No	If 'yes' consult with	ISEPP clause
Flood liable land	Are the works located on flood liable land? If so, will the works change flood patterns to more than a <i>minor</i> extent?	No	Dubbo Regional Council	ISEPP cl.15

#### Public authorities other than councils

Issue	Potential impact	Yes / No	If 'yes' consult with	ISEPP clause
National parks and reserves	Are the works adjacent to a national park or nature reserve, or other area reserved under the <i>National Parks and Wildlife Act 1974</i> , or on land acquired under that Act?	No	Office of Environment and Heritage	ISEPP cl.16(2)(a)
National parks and reserves	Are the works on land in Zone E1 National Parks and Nature Reserves or in a land use zone equivalent to that zone?	No	Office of Environment and Heritage	ISEPP cl. 16(2)(b)
Aquatic reserves	Are the works adjacent to an aquatic reserve or a marine park declared under the Marine Estate Management Act 2014?	No	Department of Industry	ISEPP cl.16(2)(c)
Sydney Harbour foreshore	Are the works in the Sydney Harbour Foreshore Area as defined by the Sydney Harbour Foreshore Authority Act 1998?	No	Sydney Harbour Foreshore Authority	ISEPP cl.16(2)(d)
Bush fire prone land	Are the works for the purpose of residential development, an educational establishment, a health services facility, a correctional centre or group home in bush fire prone land?	No	Rural Fire Service	ISEPP cl.16(2)(f)
Artificial light	Would the works increase the amount of artificial light in the night sky and that is on land within the dark sky region as identified on the dark sky region map? (Note: the dark sky region is within 200 kilometres of the Siding Spring Observatory)	No	Director of the Siding Spring Observatory	ISEPP cl.16(2)(g)
Defence communications buffer land	Are the works on buffer land around the defence communications facility near Morundah? (Note: refer to Defence Communications Facility Buffer Map referred to in clause 5.15 of Lockhardt LEP 2012, Narrandera LEP 2013 and Urana LEP 2011.	No	Secretary of the Commonwealth Department of Defence	ISEPP cl. 16(2)(h)
Mine subsidence land	Are the works on land in a mine subsidence district within the meaning of the <i>Mine Subsidence Compensation Act</i> 1961?	No	Mine Subsidence Board	ISEPP cl. 16(2)(i)

# Appendix C

Detailed design drawings





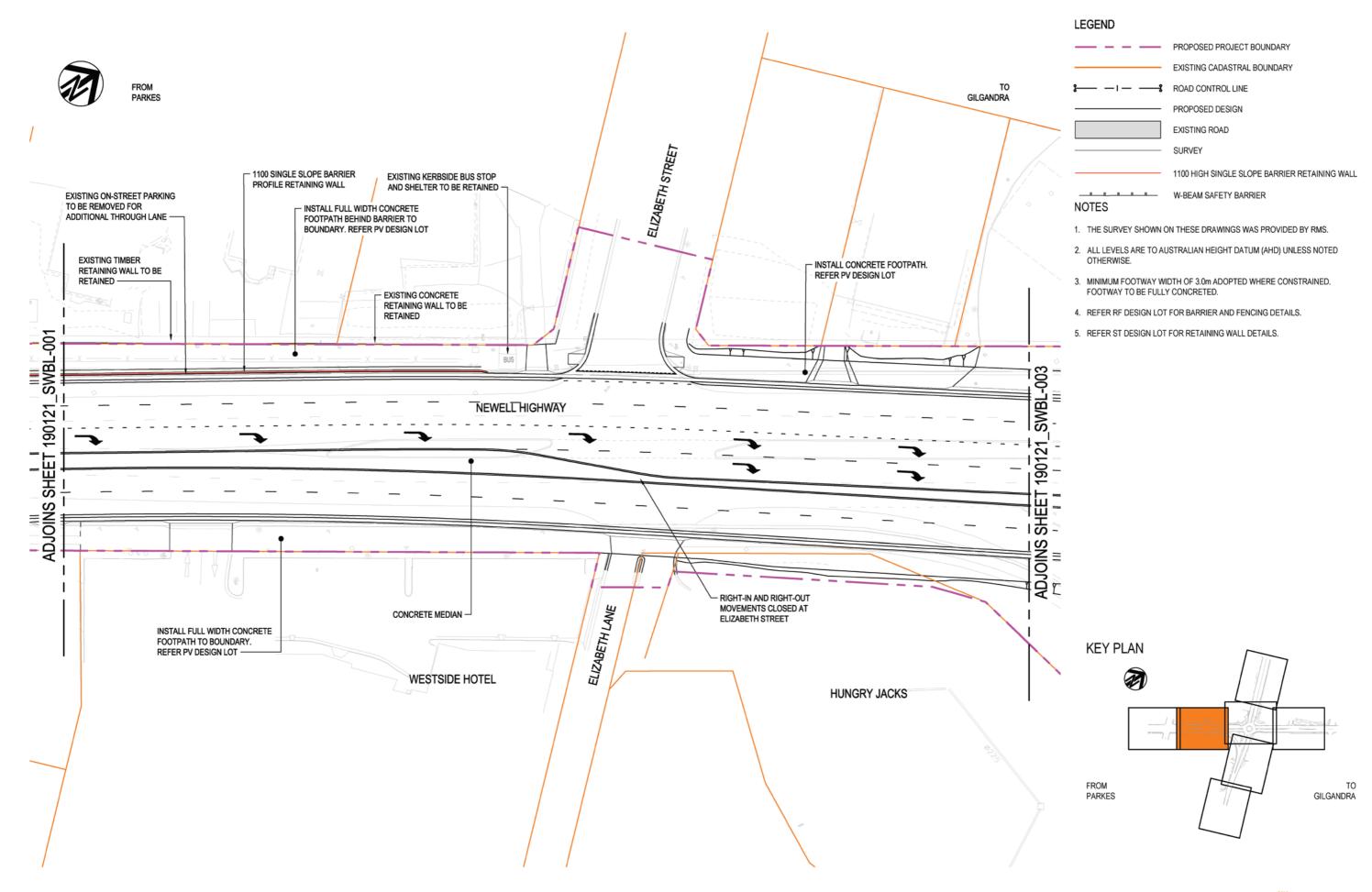


NEWELL/MITCHELL HWY INTERSECTION UPGRADE
MITCHELL SINGLE WESTBOUND LANE
SHEET 1 OF 7



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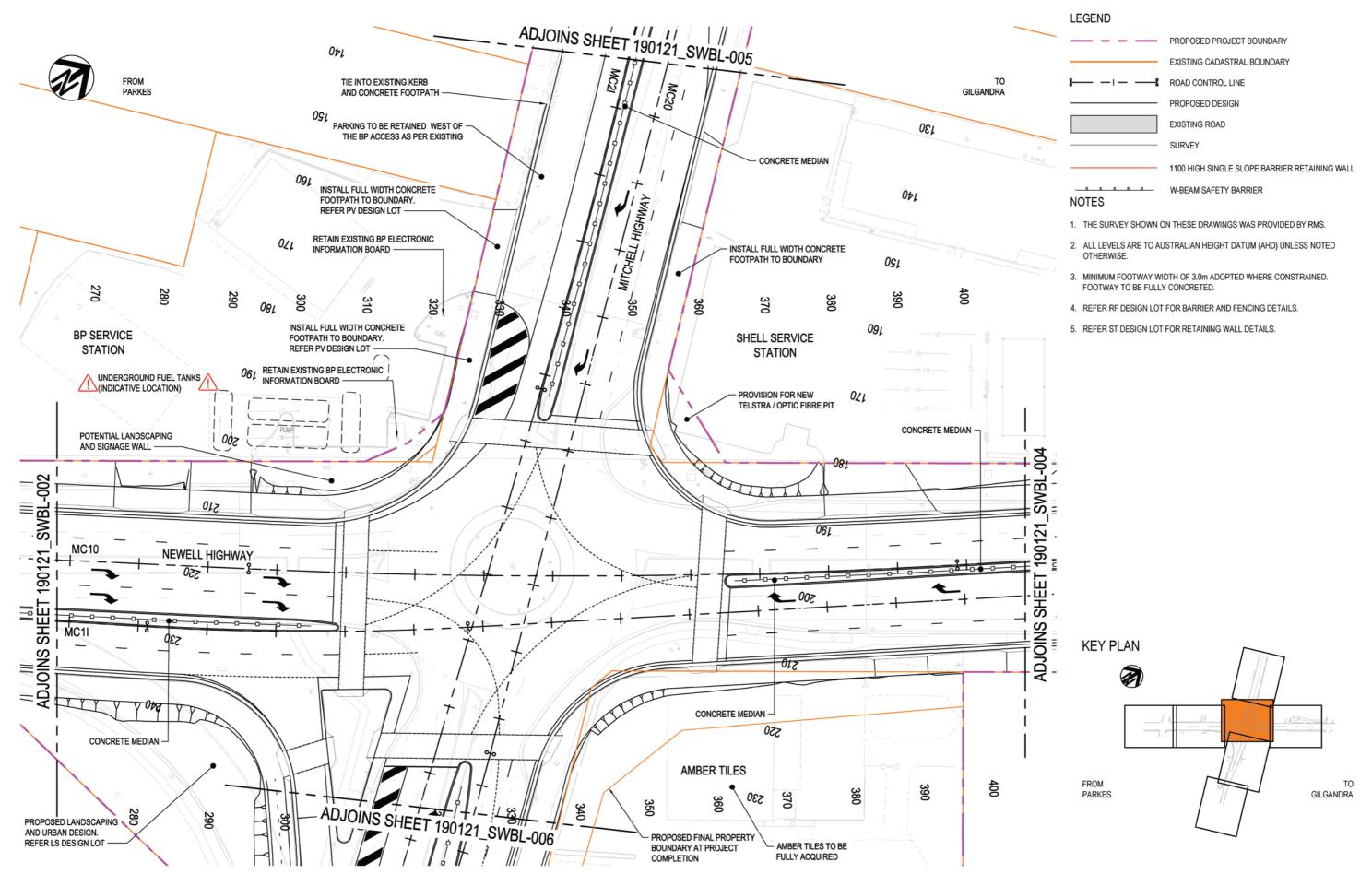


NEWELL/MITCHELL HWY INTERSECTION UPGRADE
MITCHELL SINGLE WESTBOUND LANE
SHEET 2 OF 7

#### **INFORMATION DOCUMENT**

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## NOT FOR CONSTRUCTION

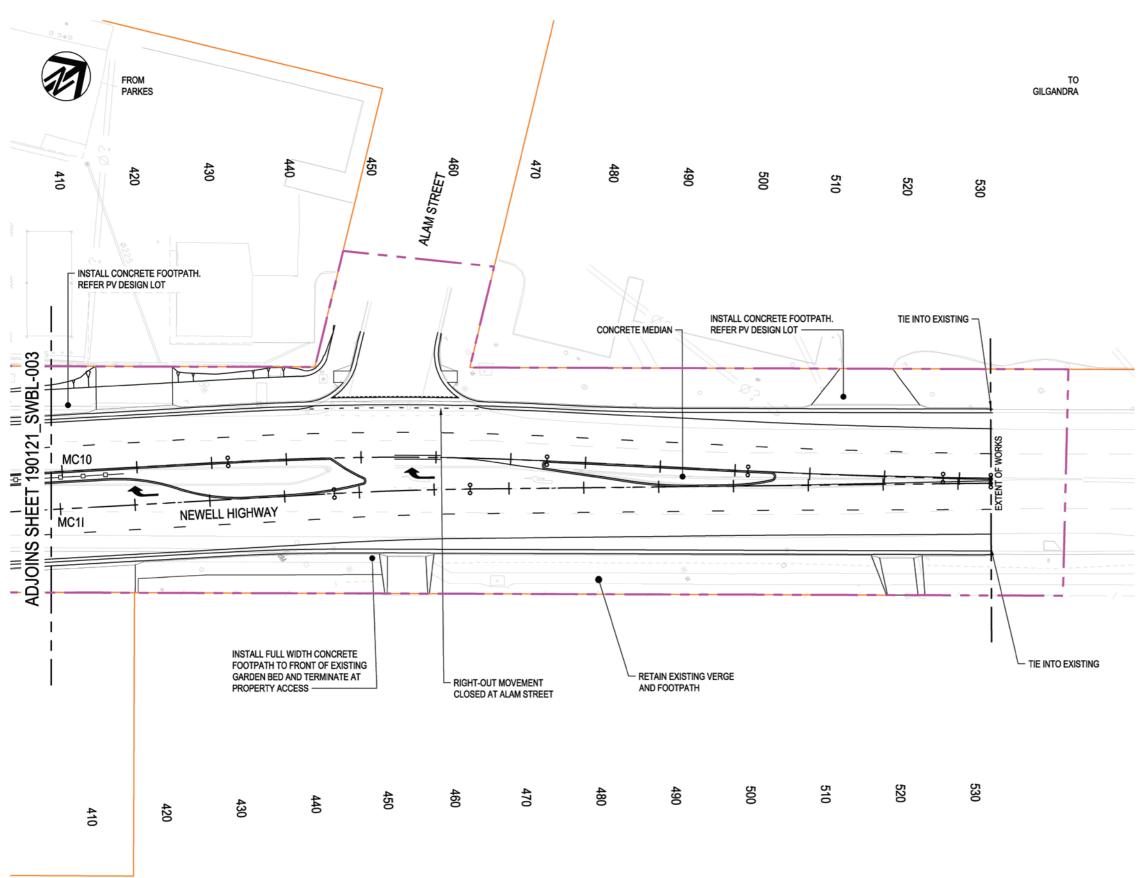


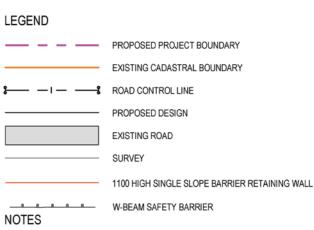
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MITCHELL SINGLE WESTBOUND LANE
SHEET 3 OF 7

#### **INFORMATION DOCUMENT**

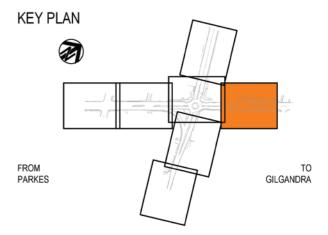
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- 1. THE SURVEY SHOWN ON THESE DRAWINGS WAS PROVIDED BY RMS.
- ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM (AHD) UNLESS NOTED OTHERWISE.
- MINIMUM FOOTWAY WIDTH OF 3.0m ADOPTED WHERE CONSTRAINED. FOOTWAY TO BE FULLY CONCRETED.
- 4. REFER RF DESIGN LOT FOR BARRIER AND FENCING DETAILS.
- 5. REFER ST DESIGN LOT FOR RETAINING WALL DETAILS.



NOT FOR CONSTRUCTION

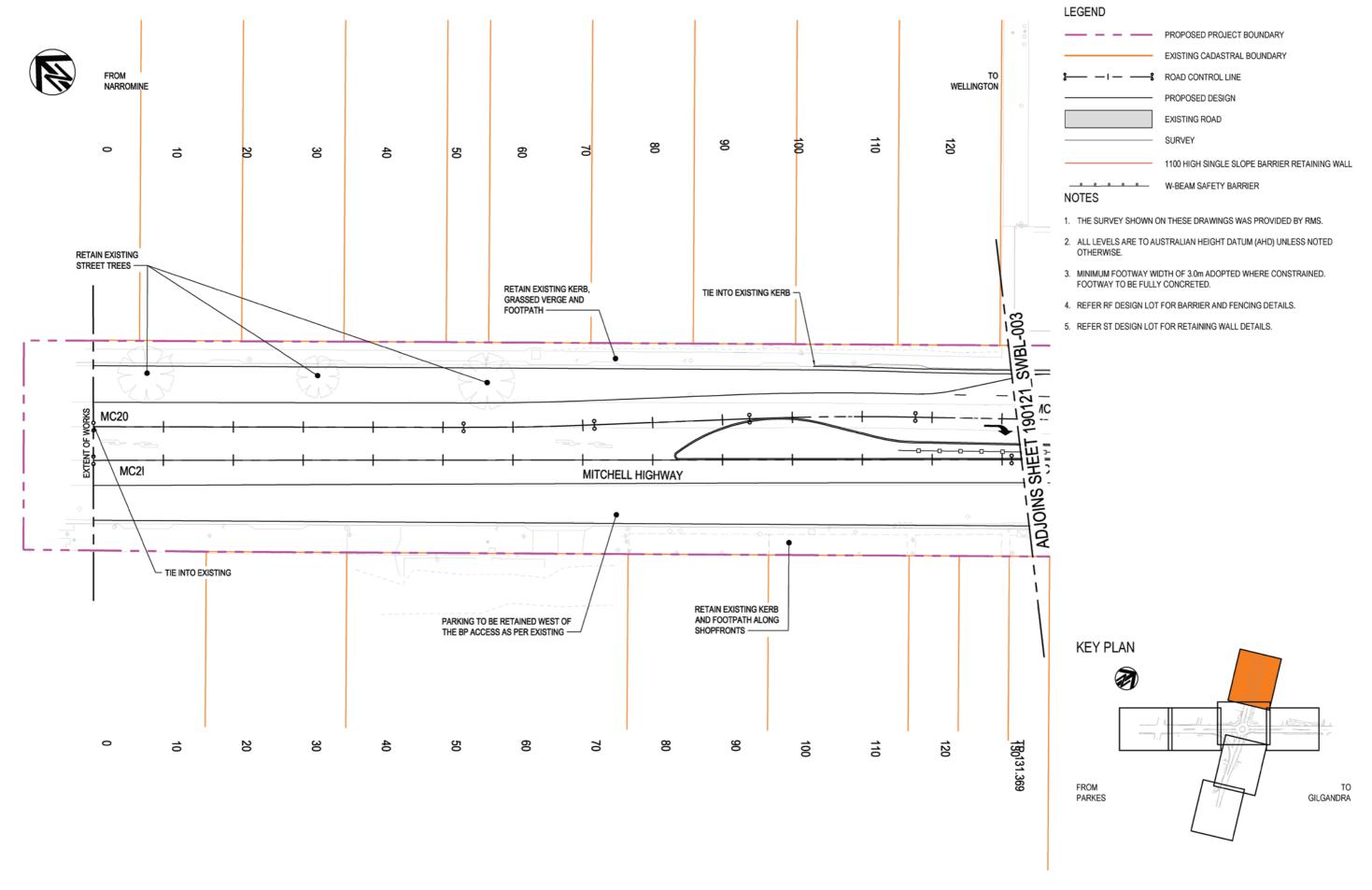
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NEWELL/MITCHELL HWY INTERSECTION UPGRADE
MITCHELL SINGLE WESTBOUND LANE
SHEET 4 OF 7

**INFORMATION DOCUMENT** 

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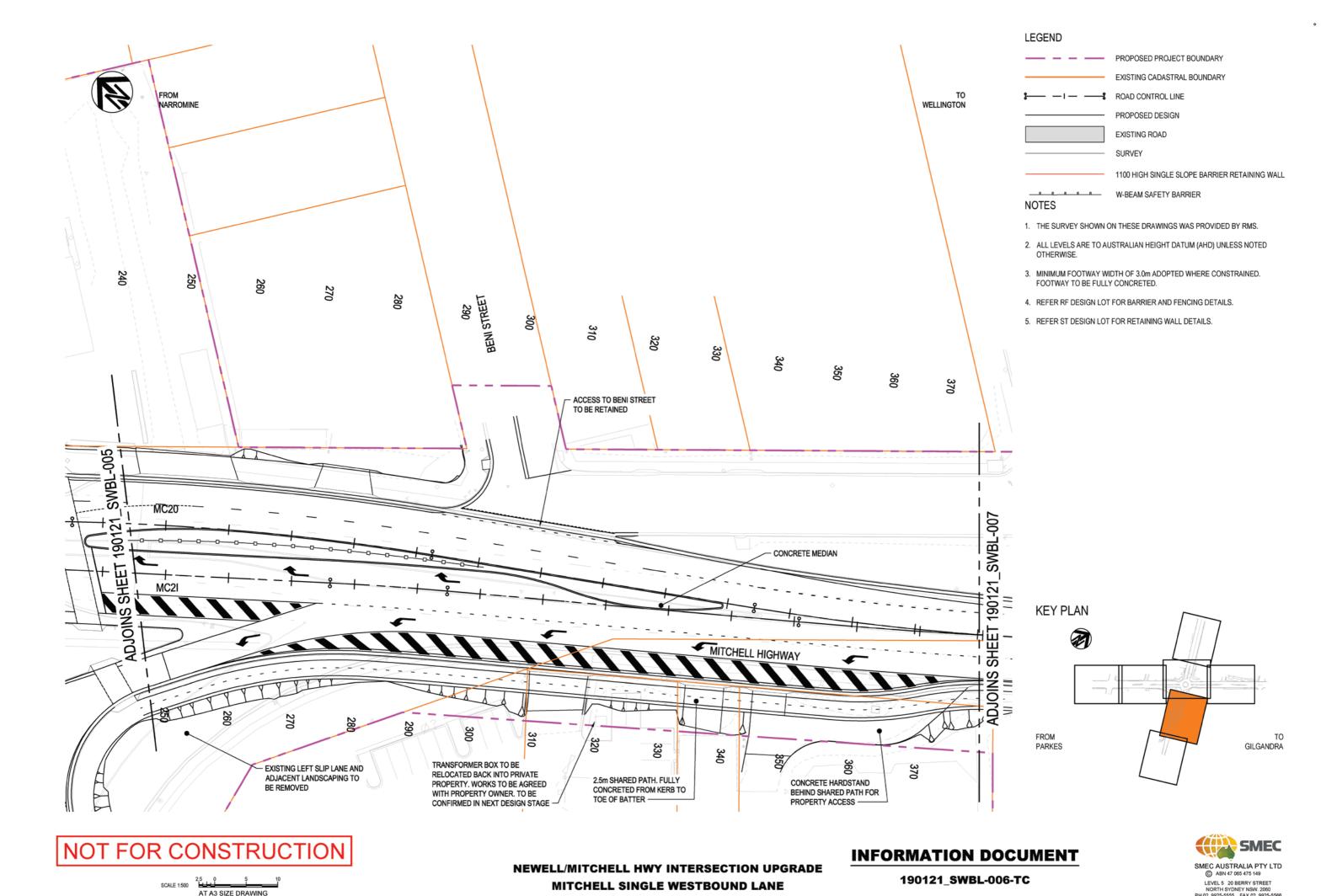


NEWELL/MITCHELL HWY INTERSECTION UPGRADE
MITCHELL SINGLE WESTBOUND LANE
SHEET 5 OF 7

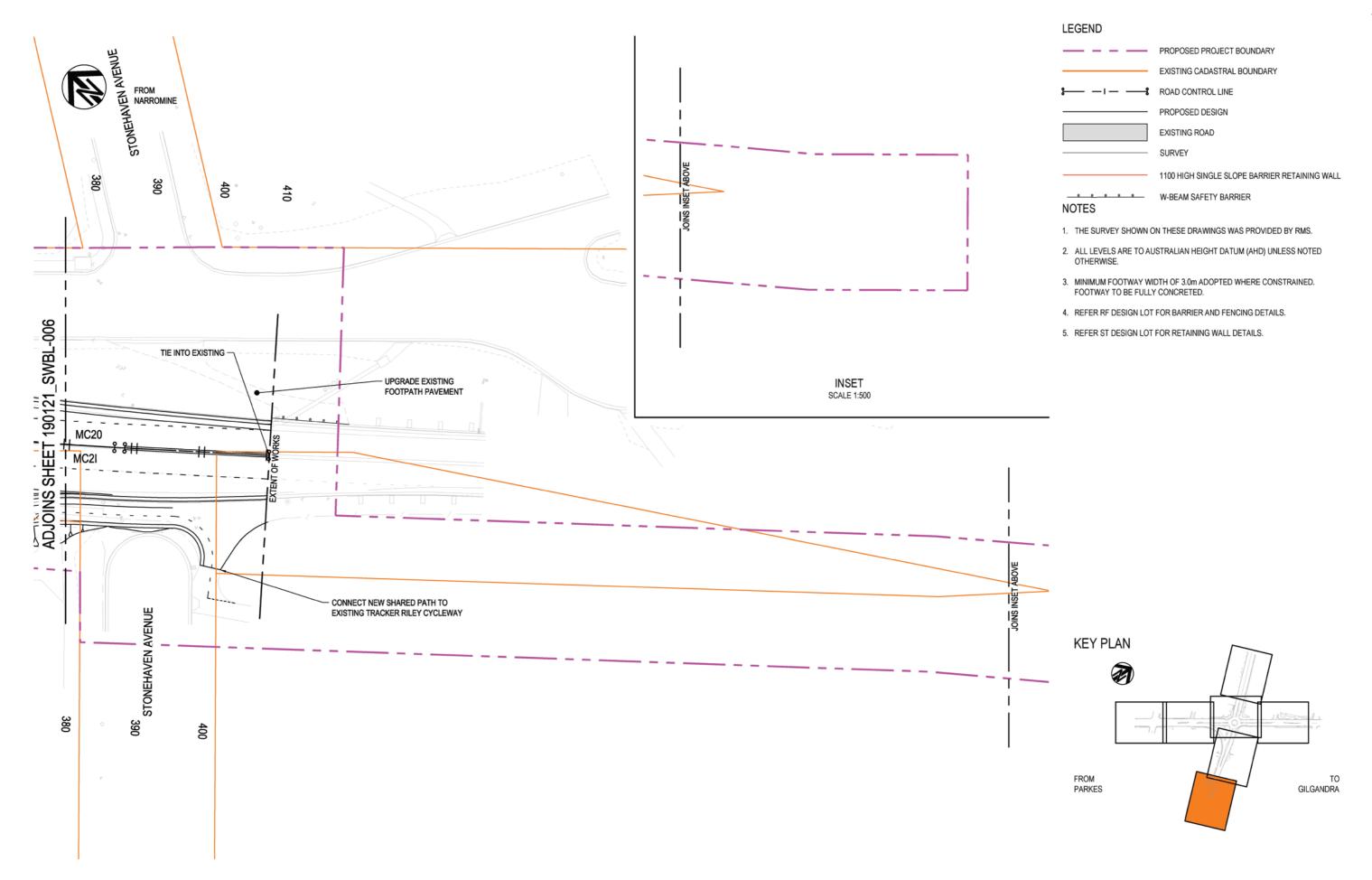


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SHEET 6 OF 7



NOT FOR CONSTRUCTION

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NEWELL/MITCHELL HWY INTERSECTION UPGRADE
MITCHELL SINGLE WESTBOUND LANE
SHEET 7 OF 7



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# Appendix E Stage 1 PACHCI clearance letter



05/07/2018
Jonathon Blizzard
Senior Environment Officer

**Dear Jonathon** 

Preliminary assessment results for upgrade of the Newell and Mitchell Highway intersection in Dubbo.Based on Stage 1 of the *Procedure for Aboriginal cultural heritage consultation and investigation* (PACHCI). 05/07/2018

The project, as described in the Project REF was assessed as being unlikely to have an impact on Aboriginal cultural heritage.

The assessment is based on the following due diligence considerations:

- The project is unlikely to harm known Aboriginal objects or places.
- The AHIMS search <u>did not</u> indicate moderate to high concentrations of Aboriginal objects and places inside the study area.
- The study area <u>does not</u> contain landscape features that indicate the presence of Aboriginal objects, based on the Office of Environment and Heritage's *Due diligence Code* of *Practice for the Protection of Aboriginal objects in NSW* and the Roads and Maritime Services' procedure.
- The cultural heritage potential of the study area appears to be reduced due to past disturbance.( Previous Construction)
- There is an absence of sandstone rock outcrops likely to contain Aboriginal art.

**Safe Guards:** Please be vigilant for further potential Aboriginal objects when construction commences.

Your project may proceed in accordance with the environmental impact assessment process, as relevant, and all other relevant approvals.

If the scope of your project changes, you must contact me and your regional environmental staff to reassess any potential impacts on Aboriginal cultural heritage.

If any potential Aboriginal objects (including skeletal remains) are discovered during the course of the project, all works in the vicinity of the find must cease. Follow the steps outlined in the Roads and Maritime Services' **Unexpected Heritage Item Procedure**.

For further assistance in this matter do not hesitate to contact me.

Yours sincerely

Aboriginal Cultural Heritage Advisor – Western Region

**Roads and Maritime Services** 







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