

# **Special Area Plan – Ornamental Snake and Brigalow habitat within the Stanwell-Gladstone Infrastructure Corridor State Development Area**

**Fitzroy to Gladstone Pipeline Project**

**Gladstone Area Water Board (GAWB)**

**June 2023**

**BASE/**



## Document Control

<b>Title</b>	Fitzroy to Gladstone Pipeline – Special Area Plan for Ornamental Snake and Brigalow habitat Waterways within the SGIC SDA
<b>Job Number</b>	J0208
<b>Client</b>	Gladstone Area Water Board (GAWB) Pty Ltd

## Document Issue

<b>Issue</b>	<b>Date</b>	<b>Prepared By</b>	<b>Reviewed/Approved By</b>
Rev A pre-contractor draft – For internal review	2/12/2022	Brandon Hourigan, Dr Craig Streatfeild	Philip Bradley
Rev B pre-contractor draft – For client review	15/12/2022	Dr Craig Streatfeild	Philip Bradley
Rev 0 pre-contractor final	19/12/2022	Dr Craig Streatfeild	Philip Bradley
Rev 1 – Update following contractor information	18/05/2023	Dr Craig Streatfeild	Simon Wakefield (GAWB)
Rev 2 – Update following MBJV review	02/06/2023	Dr Craig Streatfeild	Simon Wakefield (GAWB)

**Special Area Plan – Ornamental Snake and Brigalow habitat within the Stanwell-Gladstone Infrastructure Corridor State Development Area (SGIC SDA)**

Special Area Plan Scope
<p>This Special Area Plan (SAP) addresses construction activities of the Fitzroy to Gladstone Pipeline (FGP) project within ornamental snake and brigalow habitat at three primary locations and the lot and plans therein as outlined below. Note, ornamental snake and brigalow habitat overlap within Lot ASP226057 as shown on Figure 1.</p> <ul style="list-style-type: none"> <li>• ASP226056, ASP226057 and ASP226058 (Figure 1)</li> <li>• ASP225052 and BSP226052 (Figure 2)</li> <li>• ASP226042, ASP226043 and BSP226043 (Figure 3)</li> </ul> <p>The construction method at these locations is via an open cut trenching involving excavation using a backhoe or similar with trench spoil to be stockpiled adjacent to the excavations within the Right of Way (ROW). Following excavation of the trench, bedding material will be laid to prepare the trench for pipe laying. Following placement of the bedding, the pipe will be lowered into the trench, reinforced with concrete, backfilled with trench spoil and topsoil and rehabilitated. All disturbance will be within the ROW.</p> <p>This SAP provides mitigation measures for potential impacts to ornamental snake and brigalow habitat within the ROW from the construction of the FGP as outlined in the FGP Baseline Terrestrial and Aquatic Ecology Assessment (GHD, 2022). General mitigation measures for the FGP are outlined in the Construction Environment Management Plan (CEMP). This SAP should be read in conjunction with the CEMP.</p> <p>This SAP has been prepared to address the following Conditions of the Coordinator-General’s Evaluation Report (CGER) on the Environmental Impact Statement (EIS) and recognises that Condition 1 requires the CEMP to include the SAP as a subplan.</p> <ul style="list-style-type: none"> <li>– Condition 9: Ornamental snake habitat in the vicinity of Casuarina Road (Figure 3)</li> <li>– Condition 12: Brigalow habitat (Figure 1)</li> </ul> <p>Note, the CGER refers only to ornamental snake habitat occurring in the vicinity of Casuarina Road. However, ecological assessments undertaken in 2022 (GHD, 2022) determined ornamental snake habitat occurring at the following three locations:</p> <ol style="list-style-type: none"> <li>1. Collocated with the brigalow habitat (Figure 1)</li> <li>2. Adjacent to the eastern boundary of Inkerman Creek (Figure 2)</li> <li>3. Near Casuarina Road (Figure 3)</li> </ol>
Construction
<p>Construction activities will be undertaken every day between 6:30 am and 6:30 pm or as per approval conditions. If work is required outside of these hours, approval will be required from GAWB, accompanied by engagement with affected landholders.</p> <p>There are currently no approval conditions imposing seasonal constraints to working within these habitats. However, Condition 12 states that width of disturbance within brigalow habitat is to not exceed 15 m (refer to Figure 1).</p> <p>All personnel will be trained in the requirements of this SAP, the CEMP and other relevant environmental management plans.</p>
Review and Updates

This SAP will be reviewed and updated as required and following identification of any new information, receipt of relevant approval conditions and continual improvement initiatives.

Erosion and Sediment Control	
Control Activities	Responsibility
<ul style="list-style-type: none"> <li>– Construction activities will be undertaken in accordance with the CEMP Erosion and Sediment Control Plan and site specific Erosion and Sediment Control Plans (ESCPs) that will comply with the International Erosion Control Association (IECA) guidelines and be certified by a registered professional engineer in Queensland (RPEQ) and a Certified Professional in Erosion and Sediment Control (CPESC).</li> <li>– All erosion and sediment control devices will be installed and maintained in accordance with the ESCPs and in place prior to the commencement of construction activities at each of the habitat locations shown on Figure 1 to Figure 3.</li> <li>– Stormwater surface flows will be diverted around the ROW.</li> <li>– The area and duration of exposed soil will be kept to the minimum during construction work.</li> <li>– To prevent disturbance to areas outside the construction footprint, the ROW and access routes will be clearly delineated and shown in the ESCPs.</li> <li>– Water will be discharged from the trench in accordance with the CEMP to mitigate risk and potential impacts from erosion and sediment into adjacent ornamental snake habitat.</li> </ul>	<p>McConnell Dowell BMD Joint Venture (MBJV)</p>
Contaminated Land Management	
Control Activities	Responsibility
<ul style="list-style-type: none"> <li>– None of the habitat areas have been identified as contaminated land from desktop assessment (Environmental Management Register (EMR) and Contaminated Land Register (CLR)) as outlined in the GHD Contaminated Land Report (2022).</li> <li>– Unexpected finds will be managed in accordance with the CEMP Contaminated Land Control Plan for situations where contamination is found. If an area within the ROW is suspected of being potentially contaminated, works in that area are to cease until a site investigation can be completed, and the contamination identified and appropriately managed.</li> <li>– Any contaminated material will be reported and managed in accordance with relevant legislation/guidelines and the CEMP Contaminated Land Control Plan.</li> </ul>	<p>MBJV</p>

Acid Sulfate Soils Management	
Control Activities	Responsibility
<ul style="list-style-type: none"> <li>– An acid sulfate soil (ASS) assessment will be undertaken and if encountered, an ASS Management Plan (ASS MP) will be developed and implemented that will meet the requirements outlined in Queensland Acid Sulfate Soil Technical Manual, Soil Management Guidelines (State of Queensland, 2014).</li> <li>– If ASS is identified, the ASS MP will clearly identify Actual and Potential ASS on figures and construction drawings, and present clear management and mitigation measures.</li> <li>– ASS will be handled and treated in accordance with the ASS MP and relevant legislation/guidelines.</li> <li>– All personnel will be made aware of the requirements in the ASS MP.</li> </ul>	<p>MBJV</p>
Flora Management	
Control Activities	Responsibility
<ul style="list-style-type: none"> <li>– All works will be undertaken in accordance with the CEMP Flora and Fauna Control Plans.</li> <li>– Clear and grade operations will be restricted to the ROW and will be performed without infringing on adjacent areas.</li> <li>– Clearing the ROW in Brigalow vegetation (as shown on Figure 1) will not exceed 15 m in width, with clearing boundaries will be demarcated with high visibility fencing.</li> <li>– Following demarcation by the MBJV, pre-disturbance inspections of the areas to be cleared and/or disturbed will be undertaken by GAWB and MBJV representatives to confirm the clearing limits within areas of brigalow vegetation are correct and clearly marked.</li> <li>– During site inductions, all personnel will be briefed on ornamental snake and Brigalow habitat values and vegetation values within the ROW including vegetation and habitat to be avoided and retained along the riparian corridor.</li> <li>– Safeguards such as high visibility fencing, will be put in place to ensure that there is no damage to brigalow vegetation outside the 15 m clearing ROW.</li> <li>– A suitably qualified person (such as a qualified ecologist and/or licensed fauna spotter/catcher) will be engaged to undertake a pre-clearance survey to inspect vegetation to be removed.</li> <li>– A suitably qualified person (ecologist and/or fauna spotter/catcher) will be present during vegetation clearing.</li> </ul>	<p>MBJV</p>

<ul style="list-style-type: none"> <li>– When trenching across ornamental snake habitat as shown on Figure 1 to Figure 3, localised topsoils will be stockpiled and replaced at the completion of works to enable endemic ground layer species to re-establish.</li> <li>– Trees and vegetation to be retained within the ROW will be clearly flagged to prevent accidental removal or damage.</li> <li>– Where trees and vegetation cannot be preserved aboveground, stabilising root material will be undisturbed wherever possible.</li> <li>– Cleared, or trimmed vegetation will be stockpiled separately from topsoil. It will then be mulched and respread on the ROW in accordance with the CEMP Rehabilitation and Revegetation Control Plan or disposed of offsite at an approved location.</li> <li>– Construction activities will be scheduled to minimise the time between clearing and rehabilitation of a particular area. Rehabilitation will also be undertaken in a progressive manner.</li> </ul>	
Fauna Management	
Control Activities	Responsibility
<ul style="list-style-type: none"> <li>– All works will be undertaken in accordance with the CEMP Flora and Fauna Control Plans and approved Species Management program (SMP).</li> <li>– All personnel will be made aware of ornamental snake, including visual identification and habitat requirements.</li> <li>– Permanent construction roads or access roads outside of the ROW will not be built across areas of ornamental snake or brigalow habitat.</li> <li>– Prior to vegetation clearing (within 24 hours), a suitably qualified person (e.g., ecologist and/or fauna spotter/catcher) will inspect the construction areas to identify fauna habitat and breeding places. Clearing will not occur until the fauna spotter has confirmed the construction areas have been inspected.</li> <li>– The suitably qualified person (e.g., ecologist and/or fauna spotter/catcher) will be present during all clearing and will ensure any clearing is undertaken as per the requirements of the approved SMP and the separate yellow chat SAP.</li> <li>– At the start of work and on a daily basis, site personnel will inspect the open length of the trench for entrapped or ornamental snakes and general wildlife. If required, wildlife handlers (e.g., licensed fauna spotter/catcher) will be called to site to attend to fauna issues.</li> <li>– Logs and fallen vegetation will be used as a habitat feature post-construction to provide</li> </ul>	<p>MBJV</p>

<p>protection and potential habitat for native fauna (in agreement with landholders as required).</p> <ul style="list-style-type: none"> <li>– Cleared vegetation will be stockpiled alongside the ROW and positioned to not impede wildlife, surface drainage and to avoid damage to adjacent live vegetation.</li> <li>– A Damage Mitigation Permit will be required from the Department of Environmental and Science (DES) to interfere with wildlife.</li> <li>– Habitat green waste from clearing operations will be used to provide fauna habitat in rehabilitated areas.</li> <li>– If required, directional lighting and shields will be installed to minimise light spill outside of the immediate work areas having consideration for health and safety requirements.</li> <li>– Appropriate trench management practices are to be implemented in accordance with the CEMP Flora and Fauna Control Plans to minimise impacts to ornamental snakes.</li> <li>– Fauna exclusion fences will be established to prevent ornamental snakes from entering the open trench and/or relocated ornamental snakes inadvertently re-entering the construction areas, as far as reasonably practicable.</li> <li>– Where a trench remains open overnight or for extended lengths, ladders or suitable ornamental snake escape ramps will be installed at 500 m intervals to assist individuals to exit the trench and/or sawdust filled hessian bags (shelter sites) will be placed intermediate to the escape ramps.</li> <li>– Injured fauna will be either be treated onsite by a licensed fauna carer or taken to the nearest wildlife carer or veterinarian for treatment.</li> <li>– Any displaced ornamental snakes will be relocated to more suitable similar habitat within the surrounding area, as far as reasonably practicable.</li> <li>– Excavations will be checked for fauna prior to any backfill.</li> </ul>	
Biosecurity	
Control Activities	Responsibility
<ul style="list-style-type: none"> <li>– Construction activities will be undertaken in accordance with the CEMP Biosecurity Control Plans that includes biosecurity management measures.</li> <li>– Prior to commencement of construction, pre-clearance surveys will be undertaken to assess the presence of weeds and fauna pest species. These will be identified in the CEMP Flora and Fauna Control Plans and the CEMP Biosecurity Control Plans.</li> <li>– All food wastes or waste that could attract animals, will be kept in designated containers/bins that do not allow the access of animals. Personnel will be trained with respect to weeds (e.g., colour photos, precautions, procedures, fact sheets). Biosecurity training will be included as part of the environmental induction to be</li> </ul>	MBJV

<p>completed by all personnel prior to commencement of work on the site.</p> <ul style="list-style-type: none"> <li>– Access roads will be identified in the CEMP and adhered to during construction to prevent transport of weeds from or to other areas.</li> <li>– Vehicles and machinery will be subject to weed free certification and/or brush / wash-down prior to entering site in accordance with the requirements of the CEMP Biosecurity Control Plans and associated documentation. Proof of washdown (e.g. washdown certificates) will kept in the vehicle once it has been washed down and certified.</li> </ul>	
Water Quality	
Control Activities	Responsibility
<ul style="list-style-type: none"> <li>– Construction activities will be undertaken in accordance with the CEMP Water Resources and Water Quality Control Plan.</li> <li>– Where reasonably practicable, trenched minor waterway crossings will be undertaken during low or no flow periods.</li> <li>– Water quality will be managed and monitored in accordance with the CEMP Water Resources and Water Quality Control Plan and ESCPs including water quality requirements outlined in the IECA Guidelines (2008).</li> <li>– Stormwater will be diverted around the construction areas and site in accordance with the CEMP Water Resources and Water Quality Control Plan.</li> <li>– Where fuels and chemicals are required, storage will be in accordance with AS1940. Measures will be implemented for managing fuel and chemical handling, storage, distribution and spill response during construction.</li> <li>– Daily visual inspections for obvious signs of fuel and/or oil slicks will be undertaken in areas of standing water and/or the minor waterways downstream of the works areas. If identified, the environment manager will be notified, and appropriate actions implemented as per the water quality monitoring requirements of the CEMP Water Resources and Water Quality Control Plan.</li> <li>– Any water bodies or water bores used for extraction of construction water will be monitored for water levels and water quality extraction will cease if unacceptable impacts are identified. The OSW/2020/5467 Exemption requirements for constructing authorities for the take of water without a water entitlement (DRDMW, 2021) will be met.</li> </ul>	MBJV
Air Environment	
Control Activities	Responsibility
<ul style="list-style-type: none"> <li>– Air quality will be managed in accordance with the CEMP Air Environment Control Plan.</li> </ul>	MBJV

<ul style="list-style-type: none"> <li>– Trench spoil and topsoil will not be stockpiled to heights greater than 3 m and long-term stockpiles will be stabilised or vegetated to reduce dust generation.</li> <li>– Construction vehicles will be confined to designated access tracks in the construction areas, as far as reasonably practicable.</li> <li>– Dust suppression will be undertaken as needed along access roads, tracks and exposed soils to minimise dust.</li> <li>– Exposed ground surfaces will be mulched or revegetated as soon as reasonably practicable following construction activities and as per the ESCP requirements and the CEMP Rehabilitation and Revegetation Control Plan.</li> </ul>	
Waste Management	
Control Activities	Responsibility
<ul style="list-style-type: none"> <li>– Waste will be managed in accordance with the CEMP Waste Management Control Plan.</li> <li>– Wastewater will be managed in accordance with CEMP Water Resources and Water Quality Control Plan and includes the management of wastewater and/or slurry from the trenched crossings.</li> <li>– Trench water will be disposed downstream of ornamental snake and brigalow habitat.</li> <li>– All site personnel will be made aware of the requirements of the Waste Management Control Plan as part of their inductions, prior to commencing work.</li> <li>– All waste receptacles will be coloured for waste streams and covered to prevent vermin being attracted, water infiltration and wind from causing litter.</li> <li>– Sorting and storage recyclable wastes (such as oils, timber, steel and plastic) will occur and transported by a licensed contractor to a licensed waste management facility.</li> <li>– Regulated wastes will be transported by a licensed contractor to a licensed waste management facility able to accept the waste.</li> <li>– Sewage waste from portable toilets will be managed through the use of mobile chemical treatment systems, approved septic systems or via connection with the municipal waste sewage infrastructure, depending on location of the site.</li> <li>– Hazardous and regulated wastes will be managed as per local government or legislative requirements, stored in bunded containers / areas in accordance with AS1940 and transported and disposed of by an appropriately licensed contractor.</li> <li>– Depending on the quality of the material excavated, it may be practical to utilise excess material within the ROW. Excess spoil that cannot be reused within the construction areas will be disposed of at the nearest approved locations and generally by agreement with landowners or local council.</li> <li>– All wastes will be removed and disposed of at a licensed waste management facility</li> </ul>	MBJV

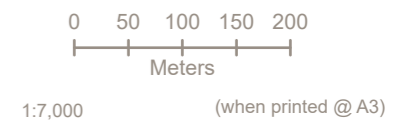
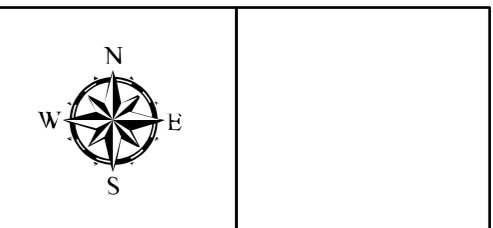
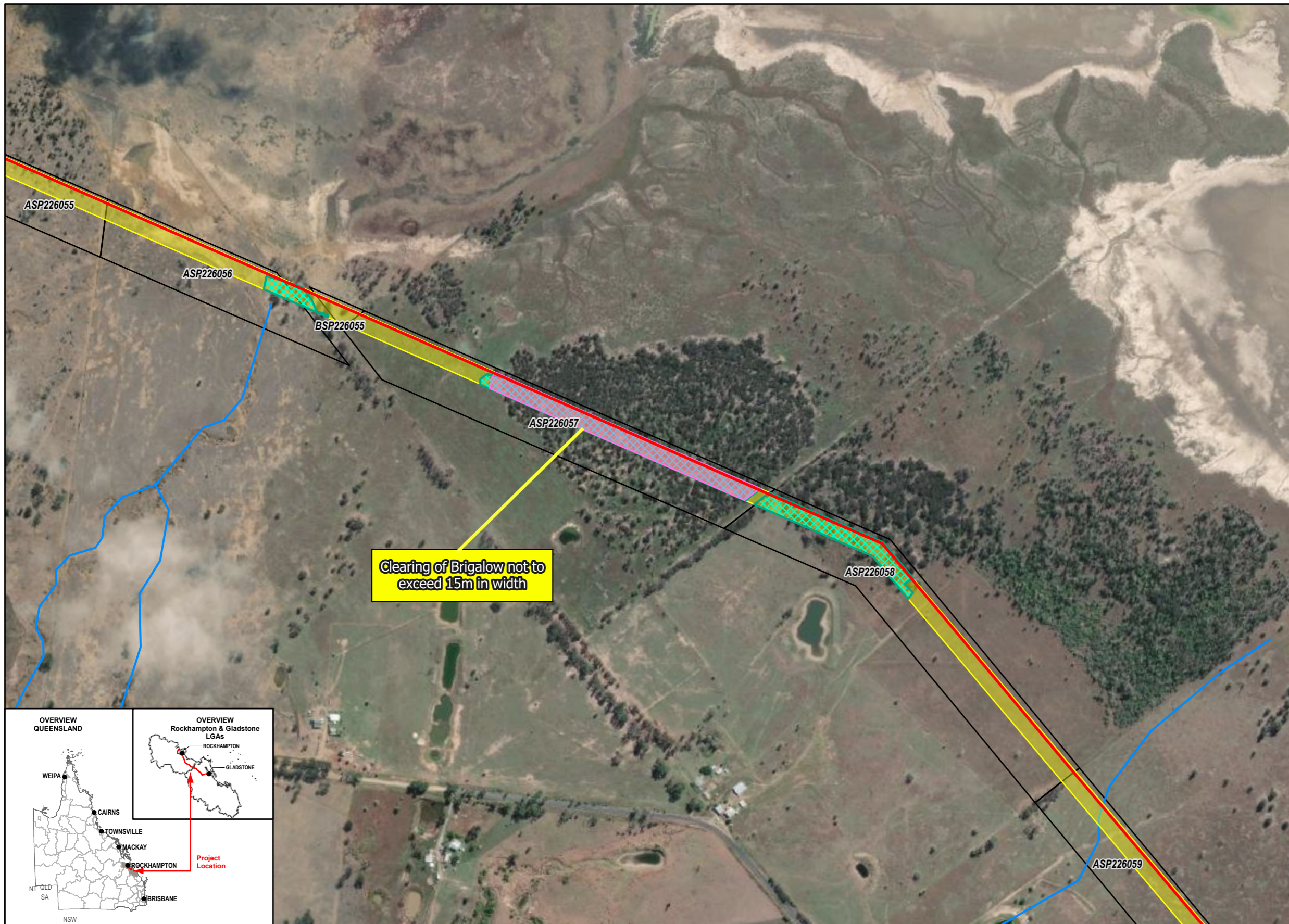
<p>regularly during construction and when construction has been completed.</p>	
Hydrotesting and Commissioning	
Control Activities	Responsibility
<ul style="list-style-type: none"> <li>– Hydrotesting will be undertaken in accordance with CEMP Hydrotest and Commissioning Control Plan for discharge of water from pipelines in relation to hydrotesting.</li> <li>– Any pipeline leaks identified during the commissioning process will be contained and cleaned up as soon as practical.</li> <li>– Test water is not to be disposed of in or upstream, of the ornamental snake habitat or Brigalow vegetation locations shown in Figure 1 to Figure 3.</li> </ul>	MBJV
Noise and Vibration Management	
Control Activities	Responsibility
<ul style="list-style-type: none"> <li>– Noise and vibration will be managed in accordance with the CEMP Noise and Vibration Control Plan.</li> <li>– All equipment and plant will be regularly maintained to manufacturers' specifications.</li> <li>– Horns and reversing alarms will be at the minimum volume level as far as practicable without compromising safety requirements.</li> <li>– A 24 hour contact number for the Project will be implemented for the construction phase so that landholders always have an immediate point of contact when they have questions or concerns.</li> <li>– All complaints received will be handled in accordance with the complaints / incidents procedure addressed in the CEMP.</li> <li>– If required, noise and vibration monitoring will be undertaken in accordance with approval conditions.</li> </ul>	MBJV
Transport and Access	
Control Activities	Responsibility
<ul style="list-style-type: none"> <li>– Traffic Management Plans (TMPs) will be developed prior to construction activities and will address site access, signage and traffic control during construction and any temporary traffic control measures.</li> <li>– Access to and from the construction areas will be via designated routes prescribed in the TMP and displayed in the CEMP.</li> <li>– Outside of the ROW, no construction roads/access tracks are permitted to be constructed across the brigalow vegetation or ornamental snake habitat included in this SAP.</li> <li>– All road crossings within or adjacent to, ornamental snake habitat, will be planned to be completed as soon as practicable, with no open trenches across roads left exposed overnight, where possible.</li> </ul>	MBJV

<ul style="list-style-type: none"> <li>All site personnel will be made aware of ornamental snake habitat and the potential for individuals to be encountered on roads and access tracks (i.e. individual snakes crossing the roads/tracks).</li> </ul>	
Cultural Heritage	
Control Activities	Responsibility
<ul style="list-style-type: none"> <li>All works will be undertaken in accordance with the approved Cultural Heritage Management Plan (CHMP) and the requirements of the CEMP Cultural Heritage Management Control Plan.</li> <li>A Cultural Heritage survey of the construction areas will be undertaken in accordance with the requirements of the approved CHMP and the status of the survey shown on the SAP figure using a traffic light approach (e.g., red = not surveyed, amber = surveyed but not yet cleared and green = surveyed and cleared). The environmental induction will include a basic level of training for all personnel with regard to their obligations under the CHMP and the measures to be taken in the event of a historic or Aboriginal Cultural Heritage find.</li> </ul>	MBJV
Dangerous and Hazardous Goods	
Control Activities	Responsibility
<ul style="list-style-type: none"> <li>Dangerous and hazardous material will be managed in accordance with the CEMP Handling and Storage of Dangerous and Hazardous Goods Control Plan.</li> <li>Hazardous wastes will be controlled as per local government or legislative requirements, emergency use of a spill kit, banded and/or contained to avoid release and transported and disposed of by an appropriately licensed contractor.</li> <li>Any spills will be managed and cleaned up as soon as possible.</li> <li>Appropriately stocked spill kits will be located in each construction area. All site personnel will receive an induction prior to commencing work in the handling and storage of dangerous goods and in spill containment procedures.</li> <li>A hazard identification and risk assessment process will be undertaken for the storage of dangerous goods in the ROW.</li> <li>The Safety Data Sheets (SDS) for all dangerous goods and hazardous materials will be kept on site.</li> <li>Where practicable, any refuelling undertaken at site will be undertaken in a designated refuelling area to reduce the risk of contamination to the environment and outside of brigalow and ornamental snake habitat.</li> <li>No hazardous materials will be stored within brigalow vegetation or ornamental snake habitat.</li> <li>Regulated wastes will be recorded and transported by a licensed contractor to a</li> </ul>	MBJV

licensed waste management facility able to accept the waste.	
Landscape and Visual Amenity	
Control Activities	Responsibility
<ul style="list-style-type: none"> <li>Landscape and visual amenity will be managed in accordance with the CEMP Landscape and Visual Amenity Control Plan Control Plan.</li> <li>Vegetation clearance within brigalow habitat will not exceed 15 m in width.</li> <li>Upon completion of construction, all construction materials will be removed and transported to a suitable location.</li> <li>Appearance of other features such as signs and fencing for safety are considered as having minimal visual amenity impacts and will be removed following construction.</li> <li>Rehabilitation will be undertaken within the brigalow and ornamental snake habitat areas in accordance with the CEMP Rehabilitation and Revegetation Control Plan.</li> </ul>	MBJV
Rehabilitation and Remediation	
Control Activities	Responsibility
<ul style="list-style-type: none"> <li>Remediation activities at the construction zones will be undertaken in the accordance with the CEMP Rehabilitation and Revegetation Control Plan.</li> <li>The extent and species mix of vegetation and/or fauna habitat, will be determined during pre-clearance surveys. These details will be included in the CEMP Rehabilitation and Revegetation Control Plan following the pre-clearance surveys.</li> <li>Rehabilitation methods will include: <ul style="list-style-type: none"> <li>Reinstatement, which is the process of bringing the landscape back to the original profile of the surrounding environment, including site stabilisation.</li> <li>Rehabilitation which is the process of establishing vegetation back onto the site following reinstatement.</li> <li>Ongoing management of rehabilitation areas to control pest species, minimise threats to rehabilitation success and rectify erosion and landform stability issues identified during monitoring.</li> </ul> </li> <li>Prior to clearing activities and where possible, marine plants will be removed and relocated to a suitable area within the ROW or a suitable nursery with plant health monitored during daily inspections. Following civil works, surviving plants will be relocated back to the area they were removed from.</li> <li>Topsoil will be stripped, stockpiled away from waterways and separately to other cleared material and managed in accordance with the CEMP Rehabilitation and Revegetation Control Plan.</li> </ul>	MBJV

<ul style="list-style-type: none"> <li>Reinstatement will commence as soon as practicable after civil works and no later than one month after completion of works impacting marine plants.</li> <li>During reinstatement of impacted areas, soils will be replaced so that the topsoil depth is consistent with pre-clearance depths and profiles.</li> <li>Ground cover then be established at disturbed sites following respreading of topsoil. Ground cover can include organic material, leaf litter, mulch, hydromulch, living or dead plant material, rocks, logs, other woody materials or erosion control materials.</li> <li>Disturbed areas may also be sown with a cover crop immediately following topsoil respreading in areas with high erosion potential.</li> <li>Rehabilitation will primarily rely on natural regeneration from the soil seed bank and reproductive plant material delivered by the tides as well as relocating the salvaged and surviving plants back to where they were removed from.</li> <li>Where either natural regeneration or reinstatement of the relocated plants fails to meet the performance criteria outlined in the CEMP Rehabilitation and Revegetation Control Plan, assisted revegetation and direct planting will be undertaken in accordance with the Control Plan and with a species mix and density that is consistent with the pre-clearance conditions.</li> </ul>	
Contact Details	
Refer to CEMP for contact details.	MBJV





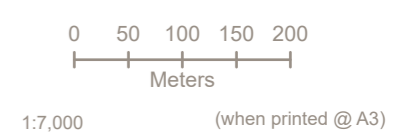
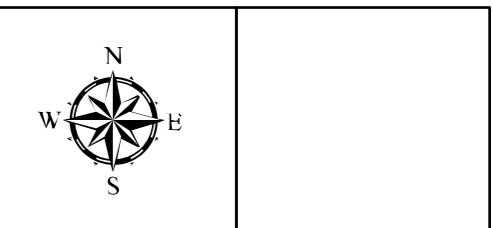
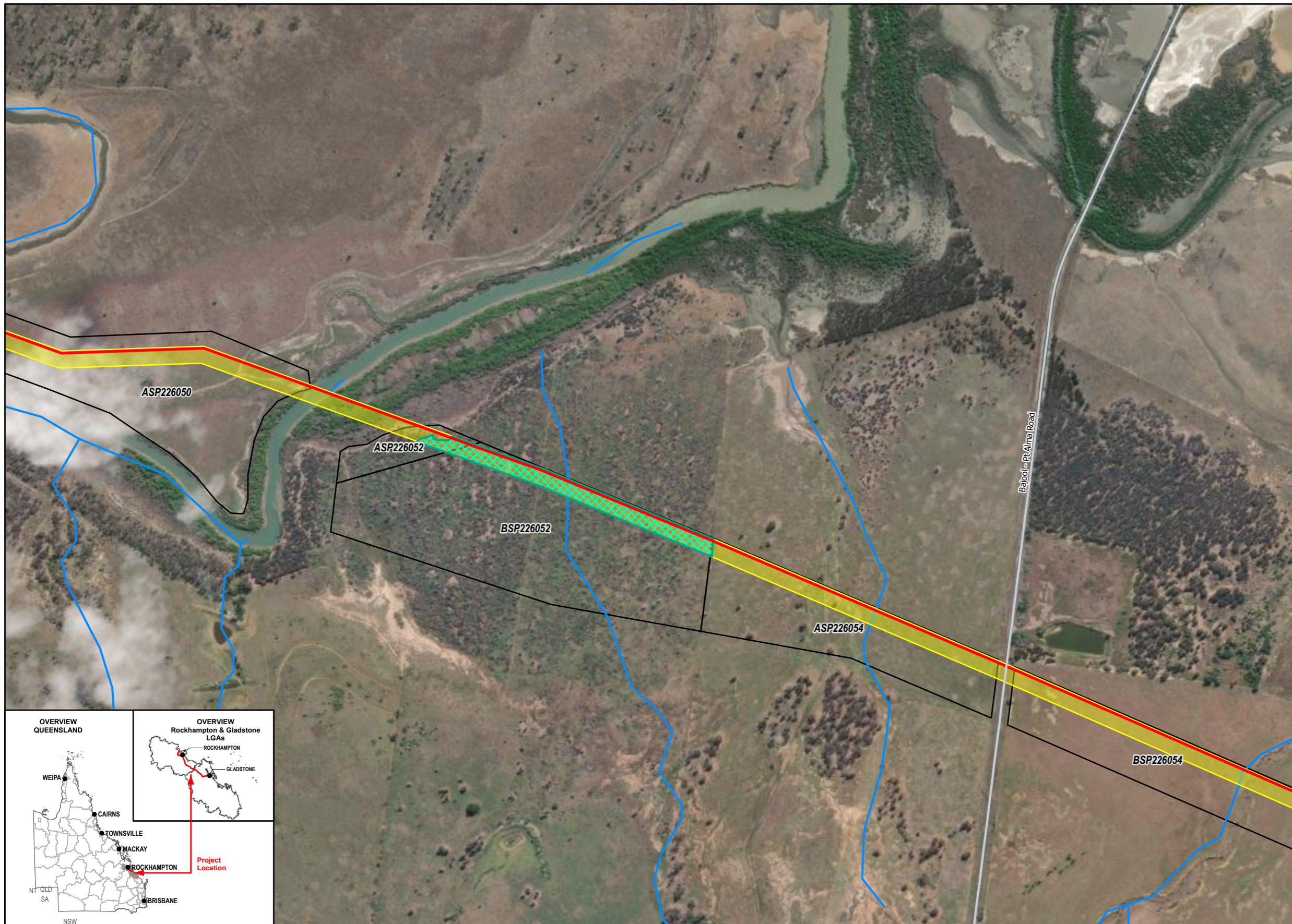
**LEGEND**

- Pipe Alignment
- Waterways
- Brigalow Habitat
- Ornamental Snake Habitat
- Right of Way - SGIC
- Easement Area

**Data Sources:**  
 1. Base Layers (Roads, waterway, locality, LGA etc) @ QSpatial, 2021  
 2. Property Boundary @ Department of Resources 2021  
 3. Indicative Ecology Survey Location(s) @ GAWB 2022  
 4. Imagery @ Esri, Maxar, GeoEye, Earthstar Geographics, CNES-Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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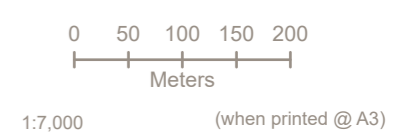
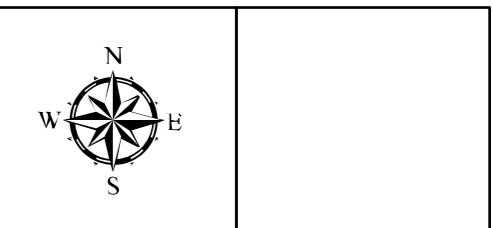
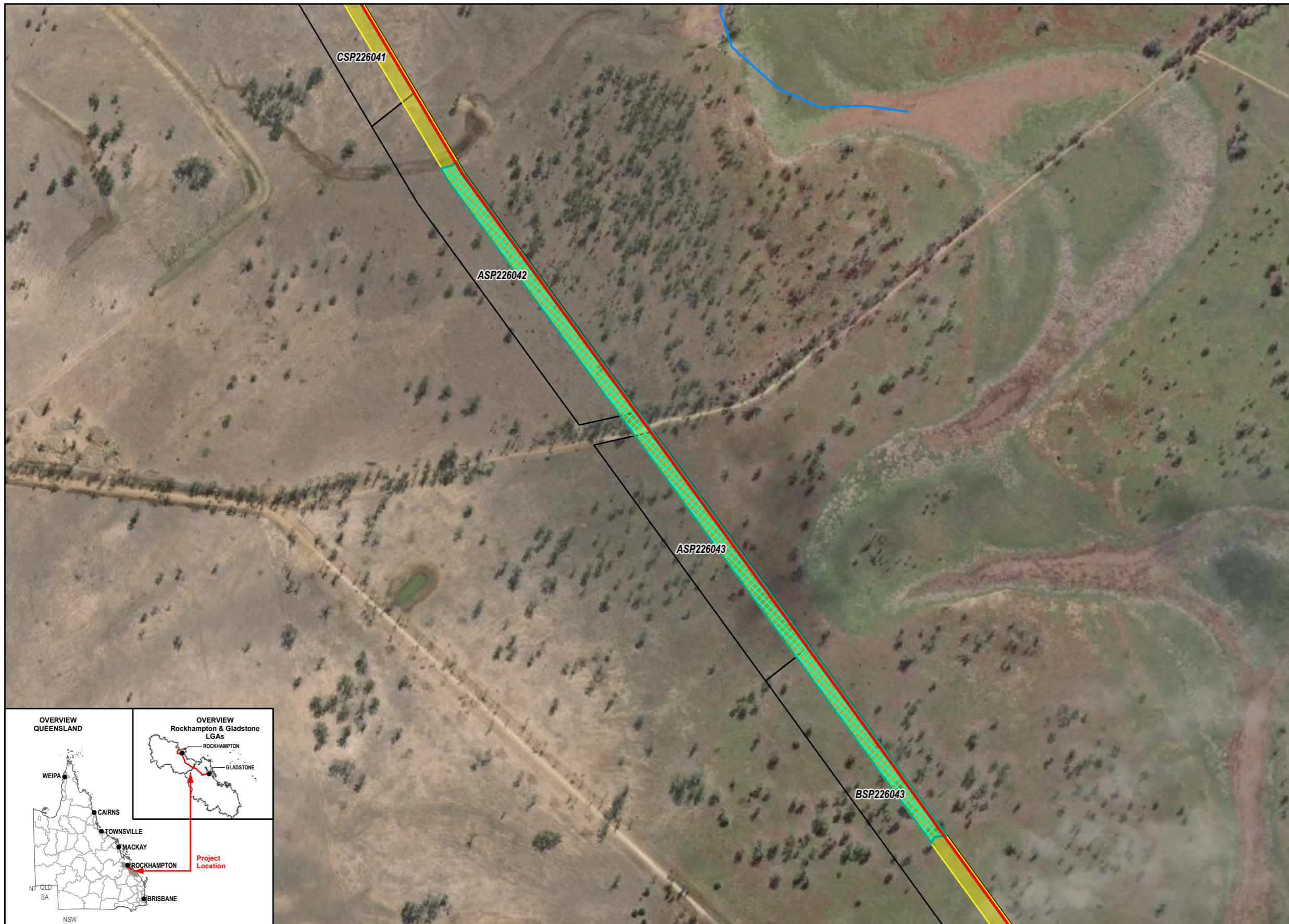
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