

# 1. Planning Assessment – Sarina Shire Council Planning Scheme 2006

## 1.1 Area Codes

### 1.1.1 Open Space Zone Code

#### Effects of Uses

Specific Outcomes	Probable Solutions	Project Compliance
<b><i>Cultural heritage</i></b>		
(a) The significance of known places of Indigenous and non-Indigenous cultural heritage value is retained.	-	<b>PC1</b> - Refer to Chapter 13 of the EIS (Appendix A) - To ensure Aboriginal and non-Indigenous duty of care is implemented throughout the Project, and to minimise or prevent the loss and damage to items of cultural heritage or archaeological significance, a cultural heritage management plan (CHMP) will be finalised prior to construction commencing in 2008.
<b><i>Amenity, Public Health or Safety</i></b>		
(b) There are no significant adverse effects on amenity, public health or safety, with regard to: (i) The siting, scale and design of buildings or other works; or (ii) Sewage disposal; or (iii) Permanent or temporary occupation of, or access to, areas subject to natural hazards.	(a) For subsection (1)(b)(i): (i) the maximum height of a building, structure or object is 8.5m; and (ii) the setback for any building, structure or object is 6m from the frontage.	<b>PC2</b> – All buildings will be set back at least 100m from the nearest road frontage (Gurnetts Road).  The height of the proposed buildings are as follows:  <ul style="list-style-type: none"> <li>Wagon Maintenance Facility: 11.9 m (to the top of the roof)</li> <li>Locomotive Provisioning Facility: 10.3 m (to the top of the roof) / 15.7 m (to the top of the sand tanks located on the roof)</li> <li>Station Building: Elevation plans are not yet available for the proposed station building; however, the building will be single storey.</li> </ul> While the proposed buildings exceed the maximum height of 8.5 m, the proposed heights are necessary in order to provide adequate space to accommodate the coal trains and wagons which will utilise the facilities. The excess height of the proposed

Specific Outcomes	Probable Solutions	Project Compliance
		<p>buildings is not anticipated to have any significant adverse effects on amenity, public health or safety.</p> <p>The proposed waste water treatment plant (subject to a separate development application) will meet all legislative requirements, Australian Standards and regulatory guidelines relating to public health and safety.</p> <p>The JRYUP will be located in an area of low/moderate bushfire risk, however, a number of mitigation measures will be in place such as firebreaks, emergency access and evacuation routes (refer to the Natural Hazards Management Areas Overlay Code below).</p> <p>QR has a comprehensive risk management system and access to Emergency Services at local and state level. Additional procedures will be incorporated into the existing system to cover the new rail infrastructure and maintenance facilities.</p>
<b>Pollution</b>		
(c) Uses are located and designed to avoid significantly polluting the air, water or soil.	(b) For subsection (1)(c): (i) waste water is not discharged from the site.	<p><b>PC3</b> – Refer to Chapter 5 of the EIS (Appendix A) for a description of the existing environment, potential impacts and mitigation measures related to topography, geology and soils within the proposed JRYUP area.</p> <p>Refer to Chapter 8 of the EIS (Appendix A) which addresses the existing groundwater environment within and surrounding the project area. Potential impacts of the JRYUP are identified and mitigation measures are listed.</p> <p>Refer to Chapter 9 of the EIS (Appendix A), which presents the results of an air quality assessment of the JRYUP.</p>
<b>Natural Values</b>		
(d) Waste disposal areas are situated where there is no risk of contaminating groundwater or surface	-	<b>PC4</b> – Refer to Chapter 11 of the EIS (Appendix A), which describes the existing environment, potential impacts and

Specific Outcomes	Probable Solutions	Project Compliance
<p>water resources, and the size and design provides for the amount of waste generated on the site.</p>		<p>mitigation measures for waste management within the proposed JRYUP area.</p> <p>Based on a review of the existing facility waste management and the proposed development the following conclusions can be made:</p> <ul style="list-style-type: none"> <li>• The environmental values to be enhanced or protected are: <ul style="list-style-type: none"> <li>– The life, health and wellbeing of people</li> <li>– The diversity of ecological processes and associated ecosystems</li> <li>– Land use capability, having regard to economic considerations.</li> </ul> </li> <li>• The Jilalan Rail Yard has an existing Waste Management Plan (document OPS OI-JIL.084-1.0). Waste management at the site is the responsibility of Thiess Services (Thiess) as part of an overall, State-wide waste management contract.</li> <li>• The most significant waste materials generated from the existing facility include general waste, cardboard, metals, coal, hazardous wastes (oil, solvents, cleaning fluids, acids, alkali, batteries), sewage and trade waste. Metals (co-mingled), waste oil, coal and cardboard are re-used or recycled. The categories of waste materials from the upgraded facility will be as per current categories, with additional quantities for most materials.</li> <li>• During construction the waste materials generated from the site in addition to the operational materials include construction and demolition waste (C&amp;D waste), vegetation (from clearing), stormwater runoff from construction areas and additional sewage.</li> <li>• Management strategies to minimise waste generation and separate recyclable materials must be incorporated</li> </ul>

Specific Outcomes	Probable Solutions	Project Compliance
		<p>into the upgraded facility operations as per QR procedures. There are significant opportunities to reduce the volume of general waste materials going to landfill.</p> <ul style="list-style-type: none"> <li>• The sewage treatment facilities are capable of expansion to approximately 20 kL/day.</li> <li>• The current trade waste system (PTP) has a capacity of up to 100 m<sup>3</sup>/day and will require expansion or augmentation to address the larger facility requirements.</li> </ul>
<p>(e) There are no significant adverse effects on the natural values of the environment, including loss of natural vegetation, land degradation and loss of important views, arising from, but not limited to:</p> <ul style="list-style-type: none"> <li>(i) disturbance of the land; or</li> <li>(ii) public access; or</li> <li>(iii) fire hazard; or</li> <li>(iv) siting of building and other works; or</li> <li>(v) waste disposal.</li> </ul>	<p>-</p>	<p><b>PC5</b> – Refer to Chapter 6 of the EIS, which describes the existing environment, potential impacts and mitigation measures within the proposed Jilalan Rail Yard project area and surrounds in terms of biodiversity and significance of the ecological values.</p> <p>Historic land use activities (growing sugar cane, cattle grazing and infrastructure development) and linear disturbances (roads and rail) within and adjacent to the project area have resulted in fragmentation of the native vegetation and disrupted the ecological processes within the area.</p> <p>The construction of the rail infrastructure and associated road works will result in the removal of approximately 10.1 ha of terrestrial vegetation and 0.2 ha of marine plants.</p> <p>While 10.3 ha of native vegetation will be cleared for the Project, this is mitigated by:</p> <ul style="list-style-type: none"> <li>• Supplementary planting which may be possible along the remaining riparian vegetation along Elizabeth and Willy Creeks.</li> <li>• Avoiding areas which may contain rare and threatened flora.</li> </ul> <p>The implementation of mitigation and management measures during the construction and operation of the rail infrastructure</p>

Specific Outcomes	Probable Solutions	Project Compliance
		<p>will ensure that potential impacts to terrestrial and aquatic flora and fauna within the area is minimised.</p> <p>Whilst the proposed Project will cause significant changes to the existing visual landscape there are ways of mitigating these changes, particularly for those residents that are closest to the project area. The adverse effects of artificial lighting from the project on fauna and local residents will be minimised by implementing the recommended mitigation measures discussed in Chapter 14 of the EIS.</p>
<p>(f) Watercourses and adjacent habitat are protected by maintaining bank stability against erosion and slumping, maintaining water quality by filtering sediment, nutrients and other pollutants, and maintaining aquatic and wildlife habitat.</p>	<p>(c) For subsection (1)(f): (i) vegetation is retained along each side of a watercourse within 25 metres of each bank.</p>	<p><b>PC6</b> – Refer to Chapter 7 of the EIS, which addresses the existing environment in terms of the hydrology/hydraulics and water quality of the watercourses and wetlands within and downstream of the project area.</p> <p>The hydraulic assessment for the catchments within the project area was undertaken using a variety of models and calculations.</p> <p>Along Elizabeth Creek, analysis showed that the velocity and peak discharge of the flow as it leaves the project area is similar to existing levels, and is not necessary to undertake any further works to lessen the impact of flooding on Gurnetts Road.</p> <p>Scour protection should be installed at all bridge abutments, culvert inlets and outlets to prevent erosion from high velocities. The base of the Elizabeth Creek channel will also be lined with rock to prevent scouring.</p> <p>The proposed rail yard upgrade may impact on the water quality through increased sedimentation during construction works. This will be mitigated through appropriate sediment control such as sediment basins and monitoring.</p> <p>Water use for construction activities will be tested to ensure no</p>

Specific Outcomes	Probable Solutions	Project Compliance
		<p>adverse impacts to the surrounding environment, particularly salinity levels.</p> <p>Proposed diversions of Elizabeth Creek will incorporate measures to ensure a base flow continues to discharge east of the project area.</p> <p>During the operational phase, close monitoring of nutrient and copper levels in any discharge waters from the Jilalan Rail Yard will occur to maintain and improve the health of Elizabeth Creek.</p>

### Provision and Effects of Works

Specific Outcomes	Probable Solutions	Project Compliance
<b><i>Provision of Works</i></b>		
<p>(a) Filling or excavation, where not associated with farm management practices, is:</p> <ul style="list-style-type: none"> <li>(i) of a suitable standard for the long term stability and performance of the use;</li> <li>(ii) maintains the visual amenity of the surrounding area;</li> <li>(iii) maintains the environmental values of receiving waterways;</li> <li>(iv) maintains existing drainage paths including overland flow paths; and</li> <li>(v) ensures the site area and adjacent land is free from ponding.</li> </ul>	<p>(a) For subsection (1) (a) – filling or excavation works are constructed to standards stated in planning scheme policies 7 and 11 and the site is not on the contaminated land register.</p>	<p><b>PC7</b> – While operational works involving cutting and filling are exempt from assessment against the planning scheme, in accordance with Schedule 9, Table 4, item 1 of the <i>Integrated Planning Act 1997</i>, all works will be undertaken in accordance with relevant Council and Australian standards.</p>
<b><i>Provision and Design of Water Supply, Sewerage and Roads</i></b>		
<p>(b) Water supply, sewerage and roads are provided to:</p> <ul style="list-style-type: none"> <li>(i) meet appropriate standards at the least whole-of-life cost, including avoiding unnecessary duplication;</li> <li>(ii) be robust and fit for the purpose and</li> </ul>	<p>(b) For subsection (1) (b) – roads, water supply and sewerage works are constructed to standards stated in planning scheme policies 4, 6, 8, 9 and 11. Where connected to Council's reticulated water supply and sewerage scheme, contributions are made to Council to the standards stated in</p>	<p><b>PC8</b> - Roads, water supply and sewerage works will be constructed to meet all relevant standards, as stated in the Sarina Shire planning scheme policies 4, 6, 8, 9 and 11.</p> <p><b>Water Supply - Operation</b> The water supply to the site will be sourced from Council's</p>

Specific Outcomes	Probable Solutions	Project Compliance
<p>intended period of operation;            (iii) be easily maintained with limited use of specialist expertise or equipment required;            (iv) be comprised of components and materials that are readily accessible and available from numerous local sources; and            (vi) be readily integrated with existing systems and facilitate the orderly provision of future systems.</p>	<p>planning scheme policy 10. Where not connected to Council's reticulated water supply, a potable water supply is provided to standards described in planning scheme policy 8, appendix 8.1.</p>	<p>reticulated water supply via an existing pipeline, which runs adjacent to Armstrong Beach Road and will be constructed to comply with the standards described in the Sarina Shire Council Reticulated Water Supply Guidelines.</p> <p>Where feasible, recycling of water will be implemented to reduce the total load on the water supply. The new wagon washdown facility will have a treatment and recycling facility, which will operate independently to the existing treatment/recycling plant on the site, however they will be linked to provide a level of redundancy.</p> <p>The current potable water usage on site is approximately 30 kL/day. The estimated future demand for potable water is estimated at 50 kL per day although investigations will be undertaken to reduce this demand by recycling. The total increase will indicatively be required when the proposed construction is complete (ie December 2009).</p> <p><b>Water Supply - Construction</b>            The bulk of construction water will be required during the earthworks phase of the Project. This will be used for dust control as well as moisture conditioning of the fill material and gravels. It is estimated that the peak demand will be in the order of 2 ML per day.</p> <p>It is intended to utilise the following sources for construction water:</p> <ul style="list-style-type: none"> <li>• Existing Jilalan Rail Yard supply (for higher quality water)</li> <li>• Recycled water from treatment facilities at the existing yard, construction offices and camp</li> <li>• Plane Creek (saline water for earthworks fill and dust suppression only)</li> </ul>

Specific Outcomes	Probable Solutions	Project Compliance
		<ul style="list-style-type: none"> <li>• Local farm dams (subject to availability)</li> <li>• The effluent dam adjacent to the golf course (subject to treatment to reduce faecal coliform)</li> <li>• Groundwater (existing/new bores)</li> <li>• Sewage treatment plants associated with the Project</li> </ul> <p>Storage tanks and/or dams may be required to store water for use during construction and will mitigate against any planned or unplanned interruptions to the supply.</p> <p><b>Sewerage Works</b> Sewage inflows for the existing and developed operation facility are estimated in Table 2.2 of Chapter 2 of the EIS.</p> <p>A number of options for handling sewage on the new site are being considered. These include:</p> <ul style="list-style-type: none"> <li>• Utilisation of the existing sewage treatment plant on the site.</li> <li>• Construction of a new treatment plant, with the same licence discharge requirements as the existing plant.</li> <li>• Construction of a sump to store sewage for tankering offsite.</li> </ul> <p>The ultimate solution will involve a combination of the above options and will include consideration of reuse opportunities.</p> <p>A number of modular sewage treatment plants will be installed to treat the sewage from the construction workforce, which is estimated to peak at approximately 300 people. Where possible, one or more of these modules may remain on site as the permanent operational sewage treatment facility.</p> <p>Infrastructure contributions will be negotiated with Council.</p>



Specific Outcomes	Probable Solutions	Project Compliance
<b><i>Design of Roads</i></b>		
<p>(c) The safe and efficient operation of roads is maintained having regard to:</p> <ul style="list-style-type: none"> <li>(i) the location and design of access points;</li> <li>(ii) the design of stormwater drainage;</li> <li>(iii) impacts on any new use, through the effects of noise and dust resulting from the use of the road; and</li> <li>(iv) roads are upgraded to accommodate impacts from any new use.</li> </ul>	<p>(c) For subsection (1) (c) - vehicular access is designed and constructed to standards stated in planning scheme policy 5, with a slope of not greater than 1:5, to maintain existing drainage paths and properly manage unsuitable soil types. Contributions are made to Council for the upgrading of roads external to a site to the standards stated in planning scheme policy 12.</p>	<p><b>PC9</b> - Refer to Chapter 11 of the EIS, which describes the existing transport network, potential impacts and mitigation measures related to traffic and transport issues associated with the proposed JRYUP. Refer to Drawing SK-000-090-1027 in Appendix B for the proposed yard access roads.</p> <p>In general, access points will be designed to minimise impact on the external road network, for example haul roads will be built within the site, so that construction traffic does not create dust on unsealed roads or damage unsealed roads such as Gurnetts Road during wet weather.</p> <p>Emergency access and egress should be possible at the southern and northern ends of the site to provide rapid means of evacuation in an emergency, and so that emergency vehicles such as ambulances or fire tenders can reach the site from either the north or south. This is in addition to access in the middle of the site from Armstrong Beach Road.</p> <p>Vehicular access will be provided in accordance with Council and Australian Standards.</p> <p>Infrastructure contributions will be negotiated with Council.</p>
<b><i>Provision and Design of Vehicle Parking</i></b>		
<p>(d) On-site parking accommodates the number and nature of vehicles required to service uses on the site.</p>	<p>(d) For subsection (1) (d) – on-site parking is provided as follows:</p> <p>“Utilities – Public” – to be indicated by Council</p>	<p><b>PC10</b> – Following discussions with Sarina Shire Council, it has been indicated that there are no specific details on car parking requirements. However, Council suggests a practical approach needs to be taken having regard to:</p> <ul style="list-style-type: none"> <li>- The number of employees on-site at any one time (including a period of changeover time as this is when most impacts on car parking arrangements will be felt);</li> </ul>

Specific Outcomes	Probable Solutions	Project Compliance
		<p>- temporary parking arrangement numbers for construction periods;</p> <p>A total of 180 car parking spaces are proposed on site, including 100 spaces at the station building and 80 spaces at the Wagon Maintenance facility.</p> <p>During operation of the Rail Yard, total staff numbers are expected to rise from 212 crew members to 263 (increase of 51), with maintenance staff rising from 96 to 135 (increase of 39).</p> <p>Staff working hours at the Jilalan Rail Yard will occur in various shifts. As such, there will be a distributed demand for car parking throughout the day and night.</p> <p>The number of proposed car parking is, therefore, anticipated to be sufficient in order to cater for the anticipated number of employees on-site at any one time.</p>
<p>(e) Driveways, turning areas, parking and vehicle standing areas designed, constructed and maintained such that:</p> <ul style="list-style-type: none"> <li>(i) the gradient is suitable for vehicle parking;</li> <li>(ii) it is effectively drained and sealed;</li> <li>(iii) spaces are clearly marked and signed as appropriate;</li> <li>(iv) conflicts are minimised and public safety maximised; and</li> <li>(v) they restrict uncontrolled access to sensitive open space areas such as Freshwater Point.</li> </ul>	<p>(e) For subsection (1) (e) –Driveways, turning areas, parking and vehicle standing areas are provided to standards stated in schedule 3, part 1 and planning scheme policies 5 and 11.</p>	<p><b>PC11</b> – Refer to Drawings in Appendix B for details of proposed driveways, turning areas, parking and vehicle standing areas. These areas will be provided to standards stated in schedule 3, part 1 and planning scheme policies 5 and 11.</p>

## 1.1.2 Rural Zone Code

### Effects of Uses

Specific Outcomes	Probable Solutions	Project Compliance
<b><i>Cultural Heritage</i></b>		
(a) The significance of known places of Indigenous and non-Indigenous cultural heritage value is retained.	-	PC1 - Refer to PC1 in the Open Space Zone Code
<b><i>Amenity, Public Health or Safety</i></b>		
(b) There are no significant adverse effects on amenity, public health or safety, with regard to: (i) The siting, scale and design of buildings or other works; (ii) Sewage disposal; (iii) Permanent or temporary occupation of, or access to, areas subject to natural hazards; or (iv) Extractive uses or works located in close proximity to towns, roads or other occupied places.	(a) For subsection (1)(b)(i): (i) the maximum height of any building, structure or object is 8.5m (ii) the setback for any building, structure or object is 6m from the frontage (iii) if a house is located within 200 metres of Strategic Port Land, a 10 metre wide vegetation buffer is established along that side of the house (iv) the location of a second house on a lot is situated a minimum distance of 40m from the existing house and if the second house is located within 200 metres of Strategic Port Land, a 10 metre wide vegetation buffer is established along that side of the house (v) the maximum number of dwelling units per lot is two.	PC2 - Refer to PC2 in the Open Space Zone Code
<b><i>Pollution</i></b>		
(c) Uses are located and designed to avoid significantly polluting the air, water or soil.	(b) For subsection (1)(c): (i) waste water is not discharged from the site.	PC3 - Refer to PC3 in the Open Space Zone Code
<b><i>Natural Values</i></b>		
(d) Waste disposal areas are situated where there is no risk of contaminating groundwater or surface water resources, and the size and design provides for the amount of waste generated on the site.	-	PC4 - Refer to PC4 in the Open Space Zone Code

Specific Outcomes	Probable Solutions	Project Compliance
(e) There are no significant adverse effects on the natural values of the environment, including loss of natural vegetation, land degradation and loss of important views, arising from, but not limited to: (i) disturbance of the land; (ii) public access; (iii) fire hazard; (iv) siting of buildings and other works; or (v) waste disposal.	-	PC5 - Refer to PC5 in the Open Space Zone Code
(f) Watercourses and adjacent habitat are protected by maintaining bank stability against erosion and slumping, maintaining water quality by filtering sediment, nutrients and other pollutants, and maintaining aquatic and wildlife habitat.	(c) For subsection (1)(f): (i) vegetation is retained along each side of a watercourse within 25 metres of the high bank.	PC6 - Refer to PC6 in the Open Space Zone Code
(g) The use and values of national parks, conservation parks and resource reserves (including State Forests and Timber Reserves) are protected.	-	PC7 - The watercourses intersecting the project area discharge into Sarina Inlet and Llewellyn Bay approximately 5 km downstream of the project area. The intertidal wetlands in conjunction with the marine environs of Sarina Inlet and Llewellyn Bay are listed on the Directory of Important Wetlands in Australia and are also part of the Great Barrier Reef World Heritage Area (GBRWhA).  The Environmental Management Plans (EMPs) for the construction and operational phases (refer to Chapter 17 of the EIS, contained in Appendix A) include mitigation measures to ensure compliance with the relevant guidelines and to ensure that the environmental values of the waterways and downstream environs are protected.

#### Provision and Effects of Works

Specific Outcomes	Probable Solutions	Project Compliance
<i>Provision of Works</i>		
(a) Filling or excavation: (i) is of a suitable standard for the long term	(a) For subsection (1) (a) – filling or excavation works are constructed to standards stated in	PC8 – Refer to PC7 in the Open Space Zone Code

Specific Outcomes	Probable Solutions	Project Compliance
<p>stability and performance of the use</p> <p>(ii) maintains the visual amenity of the surrounding area</p> <p>(iii) maintains the environmental values of receiving waterways</p> <p>(iv) maintains existing drainage paths including overland flow paths</p> <p>(v) ensures the site area and adjacent land is free from ponding unless this is required as part of an approved use.</p>	<p>planning scheme policies 7 and 11 and the site is not on the contaminated land register.</p>	
<b><i>Provision and Design of Water Supply, Sewerage and Roads</i></b>		
<p>(b) Water supply, sewerage and roads are provided to:</p> <p>(i) meet appropriate standards at the least whole-of-life cost, including avoiding unnecessary duplication;</p> <p>(ii) be robust and fit for the purpose and intended period of operation;</p> <p>(iii) be easily maintained with limited use of specialist expertise or equipment required;</p> <p>(iv) be comprised of components and materials that are readily accessible and available from numerous local sources; and</p> <p>(v) be readily integrated with existing systems and facilitate the orderly provision of future systems.</p>	<p>(b) For subsection (1) (b) – roads, water supply and sewerage works are constructed to standards stated in planning scheme policies 4, 6, 8, 9 and 11. Where connected to Council's reticulated water supply and sewerage scheme, contributions are made to Council to the standards stated in planning scheme policy 10. Where not connected to Council's reticulated water supply, a potable water supply is provided to standards described in planning scheme policy 8, appendix 8.1.</p>	<p>PC9 – Refer to PC8 in the Open Space Zone Code</p>
<b><i>Design of Roads</i></b>		
<p>(c) The safe and efficient operation of roads is maintained having regard to:</p> <p>(i) the location and design of access points;</p> <p>(ii) the design of stormwater drainage;</p> <p>(iii) impacts on any new use, through the effects of noise and dust resulting from the use of the road; and</p>	<p>(c) For subsection (1) (c) - vehicular access is designed and constructed to standards stated in planning scheme policy 5, with a slope of not greater than 1:5, to maintain existing drainage paths and properly manage unsuitable soil types. Contributions are made to Council for the upgrading of roads external to a site to the</p>	<p>PC10 - Refer to PC9 in the Open Space Zone Code</p>

Specific Outcomes	Probable Solutions	Project Compliance
(iv) roads are upgraded to accommodate impacts from any new use.	standards stated in planning scheme policy 12.	
<b><i>Provision and Design of Vehicle Parking</i></b>		
(d) On-site parking accommodates the number and nature of vehicles required to service uses on the site.	(d) For subsection (1) (d) – on-site parking is provided as follows:  Utilities – Public – to be determined by Council	PC11 - Refer to PC10 in the Open Space Zone Code
(e) Driveways, turning areas, parking and vehicle standing areas designed, constructed and maintained such that: (i) the gradient is suitable for vehicle parking; (ii) it is effectively drained and sealed; (iii) spaces are clearly marked and signed as appropriate; (iv) conflicts are minimised and public safety maximised	(e) For subsection (1) (e) –Driveways, turning areas, parking and vehicle standing areas are provided to standards stated in schedule 3, part 1 and planning scheme policies 5 and 11.	PC12 - Refer to PC11 in the Open Space Zone Code

### 1.1.3 Community Purposes Zone Code

Specific Outcomes	Probable Solutions	Project Compliance
<b><i>Cultural heritage</i></b>		
(a) The significance of known places of Indigenous and non-Indigenous cultural heritage value is retained.		PC1 - Refer to PC1 in the Open Space Zone Code
<b><i>Amenity, Public Health or Safety</i></b>		
(b) There are no significant adverse effects on amenity, public health or safety, with regard to: (i) The siting, scale and design of buildings or other works; or (ii) Sewage disposal; or (iii) Permanent or temporary occupation of, or access to, areas subject to natural hazards.	(a) A building or structure has a maximum height of 8.5 metres; (b) No buildings or structures are located within 10 metres from a boundary or within 25 metres of an existing house on adjoining land.	PC2 - Refer to PC2 in the Open Space Zone Code
<b><i>Pollution</i></b>		
(c) Uses are located and designed to avoid significantly polluting the air, water and soil.	(a) waste water is not discharged from the site.	PC3 - Refer to PC3 in the Open Space Zone Code

### Provision and Effects of Works

Specific Outcomes	Probable Solutions	Project Compliance
<b><i>Siting and Provision of Works</i></b>		
(a) Filling or excavation: (i) is of a suitable standard for the long term stability and performance of the use (ii) maintains the visual amenity of the surrounding area (iii) maintains the environmental values of receiving waterways (iv) maintains existing drainage paths including overland flow paths (v) ensures the site area and adjacent land is free from ponding unless this is required as part of an approved use.	(a) For subsection (1) (a) – filling or excavation works are constructed to standards stated in planning scheme policies 7 and 11 and the site is not on the contaminated land register.	PC4 - Refer to PC7 in the Open Space Zone Code

Specific Outcomes	Probable Solutions	Project Compliance
<b><i>Provision and Design of Water Supply, Sewerage and Roads</i></b>		
(b) Water supply, sewerage and roads are provided to: (i) meet appropriate standards at the least whole-of-life cost, including avoiding unnecessary duplication; (ii) be robust and fit for the purpose and intended period of operation; (iii) be easily maintained with limited use of specialist expertise or equipment required; (iv) be comprised of components and materials that are readily accessible and available from numerous local sources; and (v) be readily integrated with existing systems and facilitate the orderly provision of future systems.	(b) For subsection (1) (b) – roads, water supply and sewerage works are constructed to standards stated in planning scheme policies 4, 6, 8, 9 and 11. Where connected to Council's reticulated water supply and sewerage scheme, contributions are made to Council to the standards stated in planning scheme policy 10. Where not connected to Council's reticulated water supply, a potable water supply is provided to standards described in planning scheme policy 8, appendix 8.1.	PC5 - Refer to PC8 in the Open Space Zone Code
<b><i>Design of Roads</i></b>		
(c) The safe and efficient operation of roads is maintained having regard to: (i) the location and design of access points; (ii) the design of stormwater drainage; (iii) impacts on any new use, through the effects of noise and dust resulting from the use of the road; and (iv) roads are upgraded to accommodate impacts from any new use.	(c) For subsection (1) (c) - vehicular access is designed and constructed to standards stated in planning scheme policy 5, with a slope of not greater than 1:5, to maintain existing drainage paths and properly manage unsuitable soil types. Contributions are made to Council for the upgrading of roads external to a site to the standards stated in planning scheme policy 12.	PC6 - Refer to PC9 in the Open Space Zone Code
<b><i>Provision and Design of Vehicle Parking</i></b>		
(d) On-site parking accommodates the number and nature of vehicles required to service uses on the site.	(d) For subsection (1) (d) – on-site parking is provided as follows:  "Utilities – Public" – to be determined by Council	PC7 - Refer to PC10 in the Open Space Zone Code
(e) Driveways, turning areas, parking and vehicle standing areas designed, constructed and maintained such that:	(e) For subsection (1) (e) –Driveways, turning areas, parking and vehicle standing areas are provided to standards stated in schedule 3, part 1	PC8 - Refer to PC11 in the Open Space Zone Code



Specific Outcomes	Probable Solutions	Project Compliance
<ul style="list-style-type: none"> <li>(i) the gradient is suitable for vehicle parking;</li> <li>(ii) it is effectively drained and sealed;</li> <li>(iii) spaces are clearly marked and signed as appropriate;</li> <li>(iv) conflicts are minimised and public safety maximised</li> </ul>	and planning scheme policies 5 and 11.	

## 1.2 Overlay Codes

### 1.2.1 Natural Hazards Management Areas Overlay Code

Specific Outcomes	Probable Solutions	Project Compliance
<b>Element (i): LOT LAYOUT and SAFETY</b>		
<p>SO1 Development maintains the safety of people and property by:</p> <p>(a) avoiding areas of High or Medium bushfire hazard; or</p> <p>(b) mitigating the risk through:</p> <ul style="list-style-type: none"> <li>• lot design and the siting of buildings; and</li> <li>• including firebreaks that provide adequate setbacks buildings/structures and hazardous vegetation and; access for fire fighting and other emergency vehicles;</li> <li>• providing adequate road access for fire fighting and other emergency vehicles and safe evacuation; and</li> <li>• providing an adequate and accessible water supply for fire fighting purposes.</li> </ul>	<p>PS1.1 The road layout provides for “through-roads” and does not include cul-de-sac and “dead end” roads.</p> <p>PS1.2 The solutions identified for specific outcome 1, Appendix 5B, State Planning Policy 1/03 Guideline-Mitigating the Adverse Impacts of Flood, Bushfire and Landslide.</p>	<p><b>PC1.1</b> – Refer to Drawing SK-000-090-1027 in Appendix B for the proposed internal road layout. The road layout provides for “through-roads” to provide adequate access for fire fighting and other emergency vehicles and safe evacuation.</p> <p><b>PC1.2</b> - Refer to Section 1.3 in Appendix F of the EIS which addresses the provisions of the SPP 1/03.</p>
<b>Element (ii): FIREBREAKS</b>		
<p>SO2 Where development involves reconfiguring a lot, firebreaks must be around and through the development (where appropriate), and must:</p> <ul style="list-style-type: none"> <li>- have sufficient width to both serve as an effective fire break and allow continuous access for fire fighting vehicles; and</li> <li>- be in secure tenure and maintained.</li> </ul>	<p>PS2.1 Firebreaks are provided by:</p> <ul style="list-style-type: none"> <li>- a minimum 20m wide cleared road reserve located between the development site and surrounding vegetated lands; or</li> <li>- roadways situated around the outside of the development site; or</li> <li>- the development being separated from medium/high bushfire hazard areas by a cleared buffer of 1.5 times the height of the canopy</li> </ul>	<p><b>PC2</b> - Not Applicable. The application does not involve a reconfiguration of a lot.</p>
	<p>PS2.2 Fire breaking trails are provided between the development site and surrounding vegetated</p>	<p><b>PC3</b> - Not Applicable. The application does not involve a reconfiguration of a lot.</p>

Specific Outcomes	Probable Solutions	Project Compliance
	lands and such trails: - have a minimum cleared width of 6 metres - have a minimum formed width of 4 metres - have a maximum gradient of 1 in 6 (16%) - are constructed and maintained to prevent erosion and provide continuous access for fire fighting vehicles - allow for vehicle access at least every 200 metres - provide passing or turning areas at least every 400 metres.	
<b><i>Element (ii): Storm Surge</i></b>		
SO3 Life and property is protected from the risk of storm surge	PS3.1 Buildings or structures are constructed at least a minimum of 0.3m above 5. 5.0AHD in coastal communities in the Town Zone as identified on Zoning Map ZM3 and the Village Zone on Zoning Maps ZM1c, ZM1d & ZM1e or 0.3m above the 100 Year ARI (including 100 Year ARI and 50 Year ARI) identified on Overlay Map NHOM3.	PC4 - Not Applicable. The site is not located within a coastal community.
<b><i>Element (iii): Reference points for identification of acid sulfate soils</i></b>		
SO4 The release of acid and associated metal contaminants into the environment is avoided or managed.	PS4.1 Reference points for identification of acid sulfate soils are not disturbed when excavating or otherwise removing soil or sediment, extracting groundwater or filling land; or	PC5 - Discussions with DNRW representatives indicate that acid sulfate soils (ASS) have been identified during previous DNRW investigations within the Plane Creek floodplain and are therefore expected to underlie the northern portion of the project area in the vicinity of the Smyths Road crossing. Further investigations will be undertaken during the detailed design phase to assess the presence/absence and the nature and extent of ASS within this area. The findings of this investigation will assist in the development of a ASS mitigation measures that will ensure that ASS treatment requirements during construction are adequately identified.
	PS4.2 Treatment and if required, ongoing management	PC6 - Refer to previous comment

Specific Outcomes	Probable Solutions	Project Compliance
	of any disturbed acid sulfate soils and drainage waters is undertaken.	
<i>Element (iv): Erosion Prone Areas</i>		
SO5 The integrity and stability of coastal areas and frontal dunes is protected.	PS5.1 Where reconfiguring a lot involves land within erosion prone limits identified on Overlay Map NHOM2, works associated with reconfiguring a lot are set back outside the erosion prone limits identified.	PC7 - Not Applicable. The application does not involve a reconfiguration of a lot.
SO6 Erosion prone areas are to remain undeveloped apart from acceptable temporary or relocatable structures for safety and recreational purposes.	PS6.1 Dwelling units are located outside of erosion prone limits identified on Overlay Map NHOM2.	PC8 - Not Applicable. No dwelling units are proposed

### 1.2.2 Economic Resources Overlay Code

Specific Outcomes	Probable Solutions	Project Compliance
<p>SO1 Material change of use and reconfiguring a lot does not reduce the utility and productive capacity of good quality agricultural land and; buildings and uses on lots adjoining good quality agricultural land are located so as to minimise any conflict arising from incompatible land uses.</p>	<p>PS1.1 Lot boundaries relate to natural features such as ridges or other catchment boundaries, drainage lines or flood flows, or remnant stands of vegetation</p>	<p><b>PC1</b> - Refer to Section 4.8 of the EIS for the project's compliance with State Planning Policy 1/92 - Development and the Conservation of Good Quality Agricultural Land.</p>
	<p>PS1.2 The minimum lot size is equal to or greater than 80ha in the Rural Zone identified on Map ZM 1; OR A proposed lot is smaller than 80ha, and the reconfiguration is a boundary rearrangement that would not create any additional lots, would improve the relationship of the lots to natural features, and (i) any new lot to be primarily used for a dwelling unit and ancillary buildings are buffered from Good Quality Agricultural Land in accordance with Table 2: Summary of buffer area design Criteria of Planning Guideline: Separating Agricultural and Residential Land Uses (DNRM &amp; DLGP) (ii) any new lot to be primarily used for a dwelling unit and ancillary buildings contain buffers described in (i) above and do not contain areas of Good Quality Agricultural Land; (iii) access to any new lot to be primarily used for a dwelling unit and ancillary buildings does not compromise the utility of Good Quality Agricultural Land; and (iv) any lot comprising the balance area of the boundary rearrangement has a minimum area of 40ha and a regular boundary configuration; and</p>	<p><b>PC2</b> - Not Applicable. The reconfiguration of a lot if not proposed.</p>

Specific Outcomes	Probable Solutions	Project Compliance
	PS1.3 The use of a premise for aquaculture is not located on land identified as good quality agricultural land.	PC3 - Not Applicable – Aquaculture is not proposed.
SO2 Buildings and uses are located on land containing construction materials if the building or use concerned protects the potential for future utilisation of these resources and; buildings and uses on lots in proximity to construction material resources are located so as to minimise any constraint to the potential for future utilisation of these resources and to minimise any conflict arising from incompatible land uses.	PS2.1 Houses are separated from a site containing construction material resources by at least 1000 m if the resource is hard rock, or 250m otherwise.	PC4 - Not Applicable - No houses are proposed

### 1.2.3 Conservation Areas Overlay Code

Specific Outcomes	Probable Solutions	Project Compliance
<p>SO1 The ecological values of remnant vegetation, waterways and coastal areas are maintained.</p>	<p>PS1.1 Remnant vegetation associated with waterways, wetlands and aquatic habitats is retained; or            PS1.2 Where clearing of remnant vegetation is unavoidable, vegetation is rehabilitated along each side of a watercourse within at least 25 metres of each high bank; or            PS1.3 The site area is set back a minimum distance of:            – 100m from Highest Astronomical Tide for coastal wetlands; or            – 50m from high bank for freshwater habitat; or            PS1.4 Remnant vegetation within the minimum distances identified in PS 1.2 and PS 1.3 is retained; or            PS1.5 Remnant vegetation, as identified on map COM 1, is maintained where associated with a forestry use.</p>	<p><b>PC1</b> – Vegetation clearing associated with the construction of the rail infrastructure and associated road works has been minimised where possible. However, approximately 0.2 ha of marine plants will be removed. This is to be mitigated by:</p> <ul style="list-style-type: none"> <li>• Supplementary planting which may be possible along the remaining riparian vegetation along Elizabeth and Willy Creeks.</li> <li>• Avoiding areas which may contain rare and threatened flora.</li> </ul> <p>The implementation of mitigation and management measures during the construction and operation of the rail infrastructure will ensure that potential impacts to aquatic flora within the area is minimised.</p>
<p>SO2 The ecological values of identified Areas on Maps COM1 and COM2 are protected and enhanced.</p>	<p>PS2.1 In partial fulfilment of SO2 - Turtle nesting areas and important wetlands are protected from:            – lighting; and            – formal pedestrian or vehicular access.</p>	<p><b>PC2</b> – Refer to Chapter 6 of the EIS (Appendix A) for a comprehensive assessment of the potential impacts and mitigation measures within the proposed JRYUP area and surrounds in terms of biodiversity and significance of the ecological values.</p>

Specific Outcomes	Probable Solutions	Project Compliance
<p>SO3 Networks of wildlife habitat are maintained or enhanced.</p>	<p>PS3.1 Remnant vegetation and habitat areas including ecological corridors are retained; or            PS3.2 Where clearing of vegetation is unavoidable, the configuration of retained vegetation ensures:            (a) the viability and connectivity of ecological corridors and habitat areas is maintained; and            (b) areas where development should not occur are identified.</p>	<p><b>PC3</b> – While 10.3 ha of native vegetation will be cleared for the Project, this is mitigated by:</p> <ul style="list-style-type: none"> <li>• Supplementary planting which may be possible along the remaining riparian vegetation along Elizabeth and Willy Creeks</li> <li>• Avoiding areas which may contain rare and threatened flora.</li> </ul> <p>The impacts to native fauna are the severing of two corridors, removal of habitat and increased edge effects. Some fauna species will be forced to relocated and compete for resources in the surrounding areas.</p> <p>However, the implementation of mitigation and management measures during the construction and operation of the rail infrastructure will ensure that potential impacts to terrestrial and aquatic flora and fauna within the area is minimised.</p> <p>Refer to Chapter 6 of the EIS (Appendix A) for further information on the effect of vegetation removal on existing corridors.</p>



Specific Outcomes	Probable Solutions	Project Compliance
<p>SO4 Building envelopes are located on that part of each lot which poses the least threat to the conservation values of the site.</p>	<p>PS4.1 Building envelopes are located in:            (a) an already cleared area; or            (b) a disturbed area with little potential for rehabilitation; or            (c) an area infected with noxious weeds; or            (d) an area 50m from important habitat and corridors or other significant landscape features (eg. vegetation along waterways); or            (e) close to an access road; and            PS4.2 Where an approved building envelope exists, development occurs within that approved building envelope; or            PS4.3 Buildings and associated infrastructure are located at least 50m from remnant native vegetation, habitat areas and ecological corridors on and adjacent to the site.</p>	<p>PC4 – The proposed station building and maintenance facilities will be located on existing rural land that has been cleared of vegetation.</p>