



***MAJOR PROJECT ASSESSMENT:  
Terminals Australia, Parkes  
Intermodal Terminal***



Director-General's  
Environmental Assessment Report  
Section 75I of the  
*Environmental Planning and Assessment  
Act 1979*

February 2007

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## **EXECUTIVE SUMMARY**

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Parkes is ideally located to play a significant role in the national freight network, as it sits at the junction of key road and rail corridors serving the eastern seaboard, and linking the eastern seaboard to southern and western Australia. To take advantage of this strategic location, Terminals Australia proposes to establish a large intermodal terminal on a 365 hectare site about 5 kilometres west of Parkes.

The proposed terminal would be located at the confluence of the Main Western and Parkes-Narromine railway lines, and developed in two stages, with the initial stage (Years 1-5) being capable of handling up to 240,000 Twenty Foot Equivalent Units (TEUs) of freight, and the ultimate stage up to 530,000 TEUs. The terminal has a capital investment value of \$135 million, and is expected to employ up to 600 people during construction and operation.

At this stage, Terminals Australia is only seeking approval for a concept plan for the proposal.

The concept plan was exhibited from 16 June 2006 to 19 July 2006. During the exhibition period, the Department received 9 submissions: 5 from government agencies; and 4 from the general public. The key issue of concern related to the impact of project related traffic on the surrounding road network, most notably at the intersections of Hartigan Avenue with the Newell Highway.

The Department's subsequent assessment found, however, that provided a range of upgrades to the surrounding road network were undertaken, in particular the upgrade of the intersections of Hartigan Avenue with the Newell Highway, the traffic impacts of the proposal would be manageable, and that all other unrelated impacts of the proposal would be mitigated or managed to provide an acceptable level of environmental performance.

The Department considers that the proposal would provide significant social and economic benefits to the region by attracting \$135 million of capital expenditure to the region, employing up to 600 people during construction and operation of the terminal, and, more importantly, capitalising on the strategic location of Parkes and developing an important cog in the national freight network.

Consequently, the Department is satisfied that the proposal is in the public interest and that the concept plan should be approved, subject to some minor modifications.



# 1. BACKGROUND

Parkes is ideally located to play a significant role in the national freight network, as it sits at the junction of key road and rail corridors serving the eastern seaboard, and linking the eastern seaboard to southern and western Australia. To take advantage of this strategic location, Terminals Australia proposes to establish a large intermodal terminal on a 365 hectare site about 5 kilometres west of Parkes.

The proposed terminal would be located at the confluence of the Main Western and Parkes-Narromine railway lines, on the northern side of Broogan Road, as outlined in Figure 1 below. The site would be bounded by Condobolin Road to the north and the Parkes-Narromine railway line to the east.

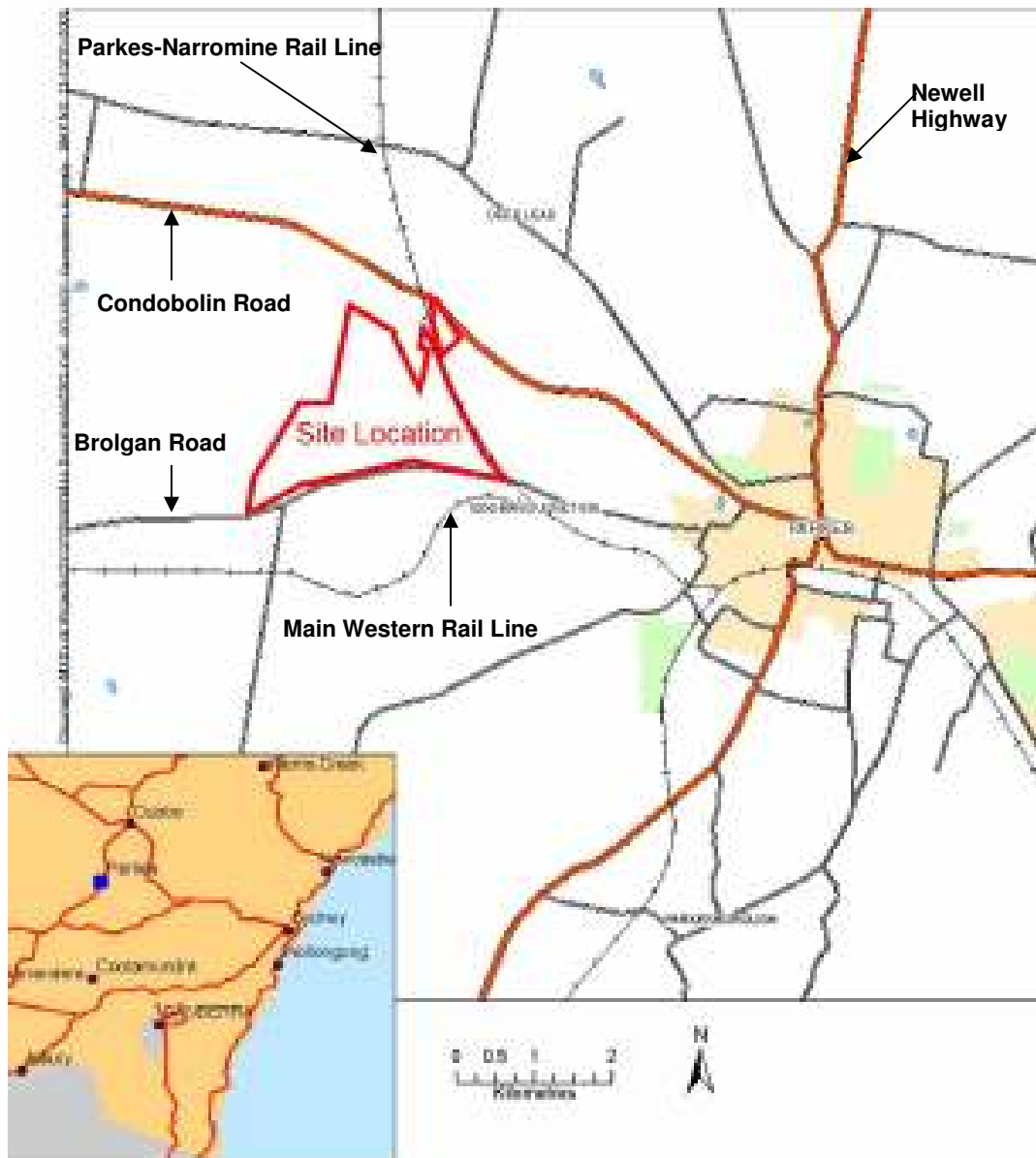


Figure 1: Proposed Site of Terminal Australia's Intermodal Terminal

The site has been used for agricultural purposes and has been largely cleared for grazing and crop purposes. Open cypress woodland, however, is located along the western boundary, and scattered areas of grassland along the southern and eastern boundaries. Residential dwellings are located to the south-west, north-east and north of the site and along Condobolin Road.

## 2. PROPOSED DEVELOPMENT

The Proponent is currently seeking concept plan approval for a road and rail freight intermodal terminal with associated warehouse and business facilities. The intermodal terminal would operate 24 hours a day, and would be used to transfer freight between trucks and trains and for long term storage. The Proponent contends that the strategic location of the intermodal terminal would facilitate a significant shift in the transportation of freight from road to rail and thereby improve the efficiency of freight movements nationally, reducing congestion in the vicinity of key ports and other transport hubs in the major centres.

The concept plan would be developed in stages, with an initial stage of the proposal being developed within 5 years. It would handle an estimated throughput of 240,000 Twenty Foot Equivalent Units (TEU) of bulk (containerised) goods and materials and be serviced by 2 trains and approximately 852 vehicles per day. Subsequent stages would be developed based on demand over a 10-15 year period. At its ultimate stage, the facility would handle an estimated throughput of 530,000 TEUs and be serviced by 4 trains and approximately 2148 vehicles per day.

Terminals Australia submitted an environmental assessment (EA) for the Concept Plan in June 2006 (see Appendix D), and a preferred project report (PPR) in February 2007 (see Appendix B).

The concept plan has a capital investment value of \$135 million and would generate a total of 600 positions during construction and up to 600 positions during operation. The major components of the proposal are described in Table 1, and outlined in Figure 2.

**Table 1: Major Components of the Proposal**

Component	Initial Stage	Ultimate Stage
Rail Sidings	<ul style="list-style-type: none"> <li>Master siding linking the Main Western Rail Line and the Parkes-Narromine Rail Line</li> <li>Mainline siding to provide a passing loop on the Parkes-Narromine Rail Line</li> <li>Intermodal sidings (2 x 1000m)</li> </ul>	<ul style="list-style-type: none"> <li>Intermodal sidings (2 x 1000m)</li> </ul>
Container Storage Areas	<ul style="list-style-type: none"> <li>Hardstand (14 ha)</li> </ul>	<ul style="list-style-type: none"> <li>Hardstand (10 ha)</li> </ul>
Warehousing	<ul style="list-style-type: none"> <li>Warehouse and offices (4 ha)</li> </ul>	<ul style="list-style-type: none"> <li>Warehouse and offices (22 ha).</li> </ul>
Rail Services Facility	<ul style="list-style-type: none"> <li>Plant maintenance facility</li> </ul>	<ul style="list-style-type: none"> <li>Locomotive servicing centre (0.5 ha)</li> <li>Containerised fuel storage facility (3.5 ha) accessed via rail sidings (2 x 800m)</li> <li>Heavy engineering facility (2.5 ha) access via rail sidings (4 x 600m)</li> <li>Wagon storage rail sidings (4 x 500-800m)</li> </ul>
Associated Infrastructure	<ul style="list-style-type: none"> <li>Administration building</li> <li>Internal roads and parking</li> <li>Access onto Brolgan Road</li> <li>Electricity, water and ISDN connection</li> <li>Bio-cycle wastewater system</li> <li>Stormwater management including underground storage and on-site detention basins</li> <li>Water harvesting and reuse</li> </ul>	<ul style="list-style-type: none"> <li>On-site roads and parking</li> <li>Access onto Condobolin Road</li> <li>Stormwater facilities including an off-site detention basin</li> <li>Town sewer system connection</li> <li>Water harvesting and reuse</li> <li>Gas connection</li> <li>Fibre optic cable connection</li> </ul>
Capacity	<ul style="list-style-type: none"> <li>240,000 TEUs</li> </ul>	<ul style="list-style-type: none"> <li>530,000 TEUs</li> </ul>
Traffic movements/Day	<ul style="list-style-type: none"> <li>850/day</li> </ul>	<ul style="list-style-type: none"> <li>2150/day</li> </ul>
Train Movements/Day	<ul style="list-style-type: none"> <li>4</li> </ul>	<ul style="list-style-type: none"> <li>8</li> </ul>
Operation	<ul style="list-style-type: none"> <li>24 hours/day</li> </ul>	<ul style="list-style-type: none"> <li>24 hours/day</li> </ul>



**Figure 2:  
Concept  
Plan for  
the Parkes  
Intermodal  
Terminal**



### 3. STATUTORY CONTEXT

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#### 3.1 Major Project

The proposal is classified as a Major Project under Part 3A of the *Environmental Planning and Assessment Act 1979* (the EP&A Act) as it complies with the criteria in Clause 23(1) of Schedule 1 of the *State Environmental Planning Policy (Major Projects) 2005* being development for purpose of railway freight facilities or inter-modal terminals, with a capital investment of more than \$30 million.

Consequently, the Minister is the approval authority for the project.

#### 3.2 Concept Plan

On 22 December 2005, the Minister authorised the Proponent to submit a concept plan for the proposal. The concept plan is seeking approval for the broad parameters of the proposal. The detailed design and development of the concept plan would be subject to future development applications.

#### 3.3 Permissibility

Under Section 75O(3) of the EP&A Act, the Minister cannot approve the concept plan for a project that would be wholly prohibited under an environmental planning instrument.

The site is located on land zoned 4(a) Industrial "Hub" under the *Parkes Local Environmental Plan 1990* and development for the purpose of a 'road transport terminal' is permissible with development consent in this zone. The Minister may therefore approve the concept plan.

#### 3.4 Environmental Planning Instruments (EPIs)

Under Section 75N and 75I(2) of the EP&A Act, the Director-General's report on this concept plan is required to include a copy or reference to the provisions of any State Environmental Planning Policy (SEPP) that substantially govern the carrying out of the concept plan.

The Department has considered the concept plan against the relevant provisions of several SEPPs, and is satisfied that none of these SEPPs substantially govern the carrying out of this project.

#### 3.5 Public Exhibition

Under Section 75N and 75H(3) of the Act, the Director General is required to make the environmental assessment of the concept plan publicly available for at least 30 days.

After accepting the environmental assessment for the concept plan, the Department:

- made it publicly available from 16 June 2006 to 19 July 2006:
  - on the Department's website; and
  - at the Department's Information Centre, Parkes Shire Council and the Nature Conservation Council;
- notified landowners in the vicinity of the site about the exhibition period by letter;
- notified relevant State government authorities and Parkes Shire Council by letter; and
- advertised the exhibition in the Parkes Champion Post.

This satisfies the requirements of Section 75N and 75H(3) of the Act.

#### 3.5 Statement of Compliance

Under Section 75N and 75I(2) of the EP&A Act, the Director-General's report is required to include a statement relating to compliance with the environmental assessment requirements with respect to the concept plan.

The Department is satisfied that, subject to the additional information provided in Terminals Australia's response to submissions, the environmental assessment requirements have been complied with.

## **4. ISSUES RAISED DURING CONSULTATION**

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During the exhibition period, the Department received 9 submissions on the concept plan (see Appendix C) including:

- 5 from government agencies (Department of Environment and Conservation [DEC], Parkes Shire Council, Department of State and Regional Development [DSRD], RailCorp and the Roads and Traffic Authority [RTA]); and
- 4 from the general public including a submission from PS Marine Pty Ltd which owns an intermodal facility nearby.

The Department of Environment and Conservation and Parkes Shire Council support the concept plan subject to certain conditions.

The Department of State and Regional Development and RailCorp do not object to the concept plan.

The RTA was initially concerned about the accuracy and adequacy of the traffic assessment and the impact of the proposed terminal on the State Road Network, in particular:

- the impact of the proposal on the intersections of Hartigan Avenue and the Newell Highway; and
- traffic delays at existing and proposed rail crossings resulting from operation of the intermodal terminal.

The RTA is now satisfied that the impacts are manageable provided Terminals Australia upgrade the Hartigan Avenue/Forbes Street/Bogan Street intersection and provide traffic lights.

PS Marine wanted the Department to ensure that the proposed terminal would not compromise the development of the broader transport "hub" and, in particular, the duplication of the Parkes-Narromine railway line and the potential Melbourne to Brisbane rail line.

The remaining submissions from the general public were generally concerned about the potential amenity impacts of the proposal, in particular:

- noise impacts from the operation of the intermodal facility and surrounding rail lines;
- dust;
- visual impacts of the proposal from surrounding properties;
- lighting impacts on surrounding properties;
- potential restrictions on developing land surrounding the site; and
- poor consultation by the proponent.

Terminals Australia has prepared a Preferred Project Report and a response to the issues raised in these submissions, which is attached in Appendix B. The Department has addressed these issues in more detail below.

## **5. ASSESSMENT OF ENVIRONMENTAL IMPACTS**

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### **5.1 Traffic**

Assessment of the traffic generation and impacts of the Concept Plan on the surrounding road network were outlined in the EA. To assist with the assessment of traffic impacts, the Department commissioned an independent traffic expert Alan Samsa. A review of the EA by the RTA and Alan Samsa identified that further details were required in relation to traffic generation rates, impacts on the surrounding road and rail network and potential mitigation

measures (Appendix E). GHD subsequently submitted a report to the Department entitled *Parkes Intermodal Terminal – Concept Design Additional Traffic Information* in November 2006 (Appendix B), which was reviewed by the RTA and Alan Samsa (Appendix E). Details of the outcome of this assessment and consultation between the Proponent, RTA, Parkes Shire Council, the Level Crossings Strategy Council and the Department have been incorporated into the Department's assessment below.

#### Traffic Generation

Traffic generation of the proposal was based on the number of trains and vehicles required to transport 240,000 TEUs at the initial stage and 530,000 TEUs at the ultimate stage. The EA estimates that a maximum of 852 traffic movements per day would be generated by the proposal at its initial stage and 2148 traffic movements per day at its ultimate stage, as outlined in Table 2.

**Table 2: Total traffic generation of the proposed intermodal terminal**

Traffic Generators	Initial Stage		Ultimate Stage	
	Peak Hour	Daily	Peak Hour	Daily
Intermodal Terminal Throughput (HV)	48	472	111	1110
Additional Warehouse Movements (HV)	3	30	7	68
Workers and deliveries	120	350	340	970
Total	171	852	458	2148

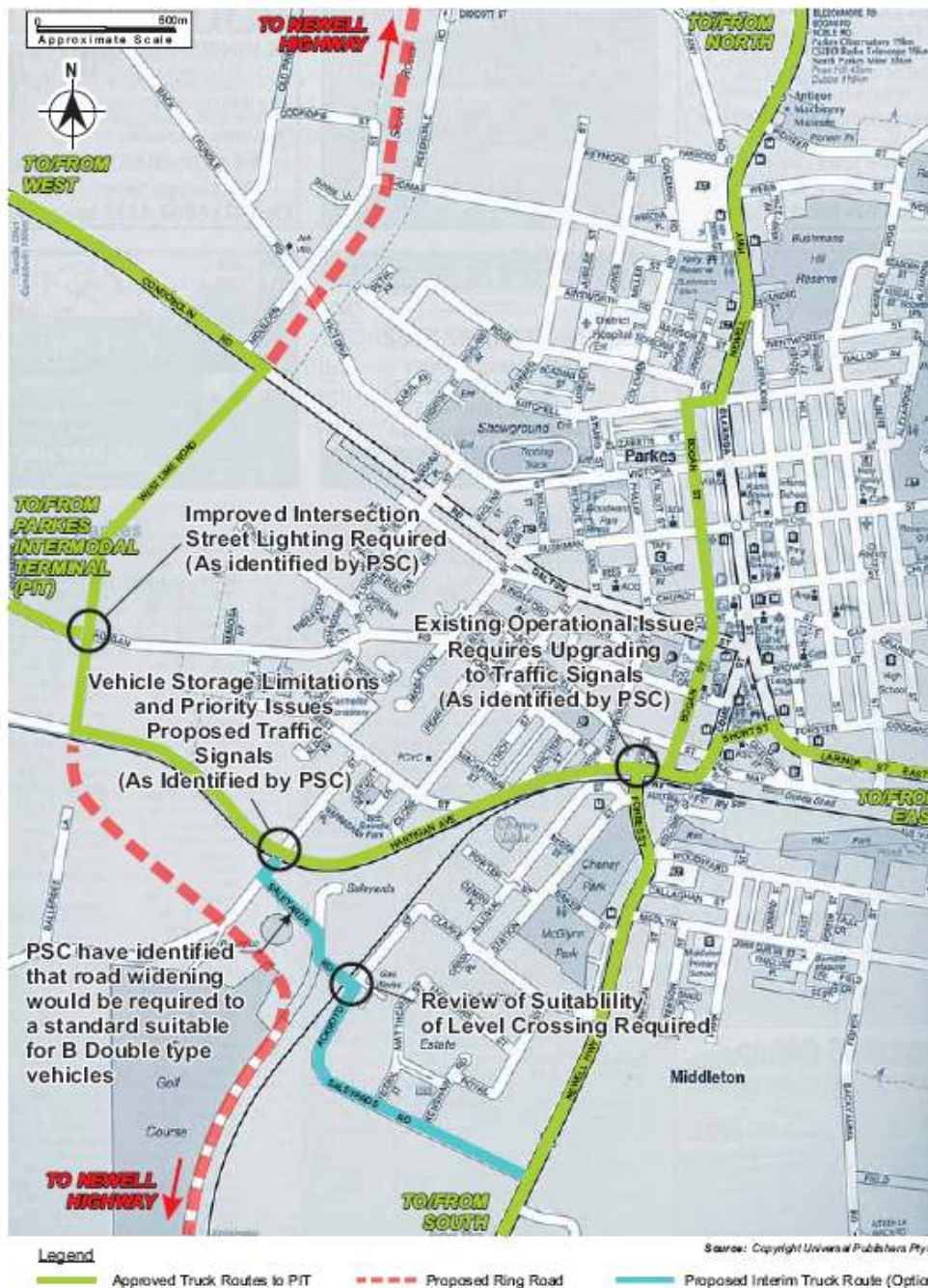
The Proponent, RTA and Alan Samsa all noted, however, that the estimated number of traffic movements generated by the proposal was difficult to predict due to there being:

- no comparable operating intermodal terminal from which to obtain traffic data;
- limited evidence available to demonstrate that the estimated mode shift from road to rail would be achieved; and
- insufficient evidence to support the assumption that fully laden inbound trucks would also transport goods from the site, during their return journey.

For the purpose of the assessment and identification of road upgrade requirements, however, the Department has used the estimated traffic levels for the initial and ultimate stages contained in the EA. The RTA has indicated that if traffic movements exceed the estimated number for the ultimate stage, further road upgrades may be required. The Department has therefore recommended that the concept plan be modified to restrict the number of vehicle movements generated by the proposal to 2200. Subsequent development applications would be required to include a traffic assessment, demonstrating that project related traffic would be safely accommodated by the surrounding road and rail network.

#### Road Performance

The majority of heavy vehicles would access the site from the Newell Highway via an approved truck route along Hartigan Avenue, West Lime Avenue and Brolgan Road, as outlined in Figure 3. A small number of heavy vehicles would also access the site via Condobolin Road.



**Figure 3:  
Heavy Vehicle Route**

Modelling of this road network was undertaken by both the Proponent and RTA in order to identify the future road performance with and without the development. The Proponent used a growth rate of 3.6 per cent based on the estimated national road freight growth outlined in the *Auslink White Paper 2004*, whilst the RTA used a growth rate of 2.0 per cent based on traffic growth along the Newell Highway in the last three years. Alan Samsa has advised that the Proponent's growth rate is high and unlikely to be sustained up to 2020. Furthermore, its use has resulted in an underestimation of the traffic related impacts of the project on the surrounding road network.

For the purposes of the assessment, traffic from the initial stage of the development was calculated for 2010 and traffic from the ultimate stage was calculated for 2020. The following

performance levels were identified as 'trigger points' for further investigation and road upgrades:

- an Average Annual Daily Traffic (AADT) of 7900 vehicles per day (vpd) or Level of Service (LOS) D for rural mid-block road sections; and
- peak hour traffic flow of 900 vehicles per lane, or LOS D, for urban mid block road sections.

Both the Proponent and RTA's modelling indicated that all rural and urban roads would perform at an acceptable level of service during the initial and ultimate stage of the development. Brolgan Road would be required to be upgraded, however, to adequately support heavy vehicles.

The Department therefore considers that the proposed roads along the truck route would adequately support traffic generated by the site, provided that Brolgan Road is appropriately upgraded to support heavy vehicles. As the Proponent and PS Marine Pty Ltd have already entered into agreement with Parkes Shire Council to upgrade Brolgan Road under the Auslink program, no further requirements are recommended by the Department.

#### Intersections

The following performance level was identified as a 'trigger point' for further investigation and intersection upgrade: an average intersection delay of 43 seconds, or LOS D, for peak periods.

The two closely located intersections of Hartigan Avenue with the Newell Highway, outlined in Figure 4 (Hartigan Avenue/Forbes Street/Bogan Street intersection), would be impacted by the proposal. Trucks travelling to and from the southern arm of the Newell Highway would access the truck route at the intersection of Forbes and Hartigan Avenue, whilst trucks travelling to and from the northern arm of the Newell Highway would access the truck route at its intersection with Bogan Street. Vehicles travelling between Bogan and Forbes Street currently have priority at these intersections, with traffic from Hartigan Avenue entering via a give-way sign.



**Figure 4: Intersections of Hartigan Avenue and the Newell Highway**

The Proponent's modelling indicated that the intersection of Hartigan Avenue and Forbes Street would operate at an unacceptable level of service by 2010 without the development, and the intersection of Hartigan Avenue and Bogan Street would operate at an unacceptable level at 2020 with the development's ultimate stage.

The RTA's modelling, however, found that:

- both intersections would operate at an acceptable level of service up to 2020 without the development;
- the current intersections would operate at an unacceptable level at 2010 with the development's initial stage;
- upgrading and integration of the intersections, via installation of one set of traffic lights, would provide an acceptable level of service at 2010 with the development's initial stage; and
- the integrated, upgraded intersection would then operate at an acceptable level of service at 2020 with the development's ultimate stage.

Alan Samsa reviewed the Proponent and RTA's modelling, and advised that the RTA modelling more accurately identified the impact of the proposal on the intersections. After

further consultation, the Proponent has committed to upgrade the intersections, prior to the commencing the initial stage of the development.

Modelling of other intersections indicates that an adequate level of service would be maintained during the initial and ultimate stages of the development. To ensure that intersections along the route would adequately support heavy vehicles, however, the following additional intersection upgrades would be undertaken:

- upgrade of the intersection of Hartigan Avenue with Blaxland Street;
- change of traffic flow priority at the intersections of Brolgan Road, Westlime Road and Hartigan Avenue; and
- lighting of the intersections of Brolgan Road, Westlime Road and Hartigan Avenue.

The Proponent and SCT have entered into an agreement with Parkes Shire Council to contribute to the upgrade of these intersections under the Auslink program.

The Department considers that the impact of the proposal on traffic flow at intersections would be adequately managed provided that the two intersections of Hartigan Avenue with the Hewell Highway are integrated and upgraded with traffic lights prior to commencing the initial stage of the concept plan. The Department has therefore recommended that the concept plan be modified to require that the Hartigan Avenue/Forbes Street/Bogan Street intersection be upgraded, to the satisfaction of the RTA, prior to any operations occurring on the site. As the Proponent and PS Marine Pty Ltd have already entered into agreement with Parkes Shire Council to modify and light the intersections of Hartigan Avenue with Blaxland Street, and the intersections of Brolgan Road, Westlime Road and Hartigan Avenue, as part of the Auslink program, no further requirements are recommended by the Department.

#### Site Access

The concept plan includes five site access points onto Brolgan Road, each separated by approximately 300 to 400 metres. Whilst the Proponent's preliminary analysis indicated that adequate sight distances would be achieved at the access points, further design safety analysis would be required to finalise the location and design of each access point. The proponent also indicated that a reduction to the existing speed limit may be required.

Both the RTA and Alan Samsa were concerned that the provision of five access points would adversely impact road safety and traffic flow movements along Brolgan Road. Alan Samsa has advised that having adequate sight distances at the current speed limit, should be preferred over a reduction in the speed limit at Brolgan Road, as traffic would be unlikely to slow down unless the physical road design was modified to compel a slower speed. Alan Samsa has therefore advised that the number of access points be reviewed at the relevant development application stage.

The Department agrees that a reduction in the posted speed limit along Brolgan Road would not, by itself, achieve adequate sight distances at each of the access points. The Department is concerned that the provision of five access points onto Brolgan Road would be substandard with respect to road safety and traffic flow movements. The Department, therefore, recommends that the concept plan be modified, with the number and location of site access points revised at the development application stage, to ensure that adequate sight distances are achieved at the current posted speed limit.

#### Rail Crossings

The concept plan includes the construction of the following new rail crossings:

- Brolgan Road West crossing resulting from the construction of a new mainline siding linking the site with the Great Western Railway during the initial stage; and
- Northern Access Road crossing resulting from the construction of a new Northern Access Road over the Parkes to Narromine Rail Line during the ultimate stage.

The proposal would result in traffic delays at the existing and proposed rail crossings outlined in Table 3.

**Table 3: Rail Crossing Impacts**

Rail Crossing	Rail Line	Traffic Delay
Brolgan Road East (existing)	Parkes-Narromine	<ul style="list-style-type: none"> <li>• 1 vehicle for approximately 2 minutes (without the development);</li> <li>• 11 vehicles for approximately 6 minutes (initial stage); and</li> <li>• 23 vehicles for approximately 6 minutes (ultimate stage).</li> </ul>
Brolgan Road West (proposed)	Main Western	<ul style="list-style-type: none"> <li>• 4 vehicles for approximately 13 minutes (initial stage); and</li> <li>• 5 vehicles for approximately 13 minutes (ultimate stage).</li> </ul>
Condobolin Road West (existing)	Parkes-Narromine	<ul style="list-style-type: none"> <li>• 2 vehicles for approximately 1 minute (without the development);</li> <li>• 10 vehicles for approximately 6 minutes (initial stage); and</li> <li>• 11 vehicles for approximately 6 minutes (ultimate stage).</li> </ul>

There would be no delays at the Northern Access Road crossing as it is proposed to be grade separated.

The RTA was concerned about the likely delays at the existing and proposed level crossings in the vicinity of the site. They advised that grade separation of each of the crossings should be considered. The Level Crossings Strategy Council (LCSC), who was also consulted, advised that a wide array of factors should be considered when determining treatment for a rail crossing including frequency of trains and volume of traffic, road geometry and visibility of trains.

The LCSC advised that the relevant road authority would be ultimately responsible for determining the treatment of the rail crossings. Following consultation with the RTA, Parkes Shire Council, the LCSC and the Department, the Proponent has requested that determination of the design of the rail crossings, be deferred to the relevant development application stage.

As there is still some level of uncertainty about design requirements for the existing and proposal rail crossings, the Department recommends that design matters be resolved at the more detailed development application phase. The Department therefore recommends that specific measures proposed for the upgrade of the existing Brolgan Road/Parkes Narromine Railway Crossing and the existing Condobolin Road/Main Western Railway Crossing, and the proposed treatments of the new Brolgan Road/Main Western Railway Crossing and the Northern Access Road/Parkes Narromine Railway Crossing, not be approved at this stage, but be determined at the development application stage, in consultation with the RTA and Council. The Department recommends that development applications include a traffic assessment, demonstrating that project related traffic would be safely accommodated by the proposed road/rail works.

#### Traffic Noise and Amenity

The concept plan should comply with road traffic noise criteria outlined in the DEC's *Environmental Criteria for Road Traffic Noise* (ECRTN). For local roads including Brolgan Road a criteria of  $L_{Aeq(1\text{ hr})}$  55dB(A) is applicable during the day and  $L_{Aeq(1\text{ hr})}$  50 dB(A) at night. Traffic noise from the development should not increase existing noise levels by more than 2dB(A), if noise levels are already above the stipulated criteria, such as along Hartigan Avenue.

Traffic noise associated with the project was estimated by the Proponent based on a noise model of existing and additional vehicles along the stipulated heavy vehicle route. The assessment indicated that noise from project traffic utilising Brolgan Road and Hartigan Avenue would be above the ECRTN as outlined in Table 4.

**Table 4: Road Traffic Noise Exceedances**

Roads	Criteria		Road Noise with PIT dB(A)	
	2010	2020	2010	2020
<b>Daytime</b>				
Brolgan Road	L <sub>Aeq</sub> (1 hr) 55	L <sub>Aeq</sub> (1 hr) 55	65.3	69.2
Hartigan Avenue	L <sub>Aeq</sub> (1 hr) 59.8	L <sub>Aeq</sub> (1 hr) 60.2	60.5	64.1
<b>Nighttime</b>				
Brolgan Road	L <sub>Aeq</sub> (1 hr) 52.5	L <sub>Aeq</sub> (1 hr) 53	62.4	66.3
Hartigan Avenue	L <sub>Aeq</sub> (1 hr) 56.9	L <sub>Aeq</sub> (1 hr) 57.3	60.5	64.1

The EA did not identify any sensitive receivers along the traffic route, however, Council subsequently confirmed that the following residences were located along Brolgan Road and Hartigan Avenue:

- three residences located on rural blocks, setback approximately 150-200 metres from the northern side of Brolgan Road;
- a recently developed residential subdivision on the north western corner of Blaxland and Hartigan Avenue; and
- residential land on the northern side of Hartigan Avenue.

The Proponent considers that it is unlikely that these sensitive receivers would be adversely impacted by traffic noise from the proposal due to setbacks from the road and provision of walls and fences at a number of properties. Insufficient evidence has been provided by the Proponent at this stage, however, to confirm this.

The Proponent has therefore committed to undertake a noise assessment of the sensitive receivers as part of each relevant development application, demonstrating that the ECRTN criteria would be met. In the event that predicted noise levels exceed the criteria, the Proponent has committed to provide noise mitigation measures at the impacted property.

The Department considers that it is important that traffic noise generated by the proposal, does not adversely impact the amenity of sensitive receivers along the defined transport routes. The Departments agrees that the setbacks and provision of walls and fences at residences along Brolgan Road and Hartigan Avenue, mean that noise levels would be considerably less than predicted in the EA. Insufficient evidence has been provided, however, to demonstrate that these noise levels would meet the ECRTN criteria. The Department therefore recommends that all subsequent development applications include a noise assessment that demonstrates that traffic noise generated by the project complies with the ECRTN criteria at the sensitive receivers. In the event that the ECRTN criteria is exceeded, the Proponent would be required to implement all reasonable and feasible noise mitigation measures at the impacted property, to ensure compliance with the criteria.

## 5.1 Other Issues

Other issues and impacts associated with the project are summarised in Table 5 below.

**Table 5: Summary of Additional Environmental Issues**

Issue	Impact	Recommendation
Operational Noise	<ul style="list-style-type: none"> <li>• Concern was raised in submissions from residences located to the north and south of the site, that the proposal would result in adverse noise impacts;</li> <li>• Predictions contained in the EA indicate that the proposal would meet the relevant noise criteria outlined in the <i>New South Wales Industrial Noise Policy</i> (INP) at the three sensitive receivers surrounding the site.</li> </ul>	<ul style="list-style-type: none"> <li>• The proposal would be required to meet the relevant noise criteria outlined in the NSW INP;</li> <li>• The Proponent would be required to demonstrate that each subsequent development application (DA) complies with the noise criteria;</li> <li>• The Proponent would be required to investigate and respond to noise complaints.</li> </ul>
Construction Noise	<ul style="list-style-type: none"> <li>• The EA indicates that the</li> </ul>	<ul style="list-style-type: none"> <li>• The Proponent would be required</li> </ul>

	construction noise criterion for over 26 weeks outlined in the DEC's <i>Environmental Noise Control Manual</i> applies.	to meet the relevant construction noise criteria.
Air Quality	<ul style="list-style-type: none"> <li>• Submissions from residents located north of the site raised concern about the generation of dust during construction;</li> <li>• The Proponent has committed to implement a Construction Air Quality Management Plan outlining methods to minimise dust generation during construction;</li> <li>• During operation, air emissions are anticipated to minimal and limited to train and vehicle emissions and fugitive emissions from the proposed fuel storage and distribution facility and maintenance activities.</li> </ul>	<ul style="list-style-type: none"> <li>• A Construction Dust Management Plan would be required for each future DA outlining dust mitigation measures during construction.</li> </ul>
Water	<ul style="list-style-type: none"> <li>• The Proponent has committed to implement a Construction Soil and Water Management Plan during construction;</li> <li>• During operation, the proposal would impact the on-site water balance and on and off-site flood risks, due to an increase in impermeable areas;</li> <li>• The Proponent has committed to limit discharge from the site to the existing discharge rate of 21.0m<sup>3</sup>/s in a 1 in 100 Average Recurrence Interval (ARI) event;</li> <li>• To achieve this, the Proponent would provide on and off-site detention basins, sub surface stormwater storage areas and other stormwater retention facilities;</li> <li>• Stormwater pollution would be minimised through installation and monitoring of bunding, drainage and other pollution control facilities;</li> <li>• Floor levels would be located above local flood levels;</li> <li>• The proposal would use town water supply and investigate options for water harvesting and reuse of stormwater.</li> </ul>	<ul style="list-style-type: none"> <li>• A Construction Soil and Water Management Plan would be required for each future DA outlining soil and water management measures during construction;</li> <li>• A detailed stormwater management scheme would be required to be submitted in each future DA.</li> </ul>
Flora and Fauna	<ul style="list-style-type: none"> <li>• The site is largely cleared, however, the north west corner supports a highly degraded remnant of the endangered ecological community (EEC) White Box Yellow Box Blakely's Red Gum Woodland;</li> </ul>	<ul style="list-style-type: none"> <li>• Future DAs should include a detailed landscape management plan.</li> </ul>

	<ul style="list-style-type: none"> <li>The EEC would not be impacted by the proposal.</li> </ul>	
Heritage	<ul style="list-style-type: none"> <li>No non-indigenous heritage items are located on the site;</li> <li>The original farm house, built in the late 19<sup>th</sup> century, would be demolished, however it is not considered to have heritage significance;</li> <li>The surveys did not identify any aboriginal items on the site.</li> </ul>	<ul style="list-style-type: none"> <li>Although the farmhouse is not listed as a heritage item, the Proponent has committed to prepare an archival record of it before it is demolished.</li> </ul>
Hazards	<ul style="list-style-type: none"> <li>Fuel based storage and refuelling facilities would be provided on site for trucks and trains utilising the facility;</li> <li>As the quantity of fuel to be stored and transported to the site does not exceed the thresholds in SEPP 33, the proposal is not considered hazardous;</li> <li>Fuel storage would be appropriately bunded and stored in accordance with Australian Standards;</li> <li>Future DAs, however, may outline other dangerous goods to be stored on-site.</li> </ul>	<ul style="list-style-type: none"> <li>There are no significant off-site risks.</li> <li>Future DAs would be required to include an assessment of the hazardous or potentially hazardous impacts of the proposed development in accordance with the provisions of SEPP 33 and its associated guidelines, and a detailed description of measures to minimise these potential impacts.</li> </ul>
Visual	<ul style="list-style-type: none"> <li>Concern was raised in submissions about the visual impact of the proposal and its lighting on surrounding properties;</li> <li>The development would be designed and screened to minimise the visual impacts on surrounding residences and the public domain;</li> <li>Night time lighting would contribute to the night time glare and increase the prominence of the site;</li> <li>External lighting, however, would be designed to minimise any obtrusive effects on surrounding residences and limit the impact of upward light and glare on observatories in the region.</li> </ul>	<ul style="list-style-type: none"> <li>Future DAs would be required to include a detailed landscaping plan demonstrating that the proposed development would be suitably screened to protect or enhance the visual amenity of surrounding residences;</li> <li>Future DAs would be required to include an external lighting plan demonstrating that lights have been design to minimise the obtrusive effects on surrounding residences and significant observatories in the region.</li> </ul>

## 6. RECOMMENDED INSTRUMENT OF APPROVAL

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The Department has prepared a recommended instrument of approval for the Concept Plan (Appendix A).

This instrument includes five modifications to the concept plan, all of which arise from the detailed assessment of the traffic impacts of the proposal. These modifications:

- require the Hartigan Avenue/Forbes Street/Bogan Street intersection be upgraded to the satisfaction of the RTA prior to any operation occurring on site;
- cap the vehicle movements allowed to be generated by the proposal to 2200 a day;
- required that the detailed design of both the upgrades of the existing railway crossings and the two new railway crossings be finalised in consultation with the RTA and Council at the development application stage; and
- require that the proposed new access roads off Brolgan Road be kept to a minimum.

This instrument also determines that the approval for the carrying out of the concept plan should be subject to Part 4 of the EP&A Act, and sets requirements for the further environmental assessment of the various components of the concept plan.

Finally the instrument declares that the development associated with the concept plan is not to be treated as designated development, although under Section 75P(2)(e) of the EP&A Act the Minister would need to make an order in the Government Gazette to formalise this determination.

## 7. CONCLUSION

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The Department has assessed the proposal and is satisfied that it would provide significant economic, social and environmental benefits to both NSW and the Parkes Region.

The project would:

- attract a capital investment of approximately \$135 million;
- provide jobs for up to 600 people during construction and operation;
- capitalise of the strategic location of Parkes by providing important infrastructure for the national freight market; and
- thereby potentially reduce the number of heavy vehicles transporting freight nationally.

The Department considers that the proposal is consistent with the NSW's government objective of encouraging greater opportunities for freight transportation via rail.

The Department's assessment indicated that the traffic impacts of the concept plan would be manageable, provided a range of upgrades on the surrounding road network were implemented, in particular the Hartigan Avenue/Forbes Street/Bogan Street intersection. The Department's assessment also indicated that other impacts of the proposal could be mitigated or managed to provide an acceptable level of environmental performance.

The Department is therefore satisfied that the environmental impacts of the project would be adequately mitigated through modifications to the instrument of approval, the Statement of Commitments and subsequent project applications.

Consequently, the Department believes that the proposal is in the public interest and should be approved.

## 8. RECOMMENDATION

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It is recommended that the Minister:

- consider the findings and recommendations of this report;
- approve the concept plan approval under Section 75O of the Act, and subject to the modifications; and
- sign the attached instrument of approval (Appendix A).