

Executive Summary

The Applicant

Sydney Ports Corporation (Sydney Ports) is the applicant for the proposed Intermodal Logistics Centre (ILC) at Enfield. The organisation was established in 1995 as the port corporation for Sydney and it is responsible for managing commercial shipping and developing port facilities in Botany Bay and Sydney Harbour. Sydney Ports generally leases its properties to private sector operators which provide the services necessary for handling and storing cargo.

The development of the proposed ILC at Enfield is consistent with the charter and objectives of Sydney Ports while contributing to the NSW Government's policies to increase the movement of container freight from Port Botany by rail.

Need for the Project

Container trade at Port Botany has been forecast to grow by about 6% per year over the next 20 years, reaching over 3 million TEU¹ per year by 2025. Currently, trucks move over 75% of containers to and from Port Botany and, as the volume of containers grows, it will be necessary to increase the use of rail to moderate growth in truck traffic and assist in the efficient transfer of containers to and from the port. To assist in handling the projected increase in container freight, land transport arrangements need to be enhanced, primarily to improve the efficient transfer of goods to their markets. Without any improvement in the capacity of the container transport chain, it is likely importers and exporters will experience delays in cargo movement which would, in turn, result in higher costs and unreliable supply. The NSW Government is seeking to avoid these problems of cost and supply by achieving an increase in the proportion of this freight carried by rail to and from Port Botany.

To date, rail has been an under-utilised resource for transporting freight. This has been recognised by the NSW Government, which aims to increase the proportion of containers transported to and from Port Botany by rail to 40% by 2011. Achieving this goal will result in an increase from the level of freight rail transport of about 21% of the current 1.27 million TEUs (about 275,000 TEUs) to the goal of 40% of the projected 1.75 million TEUs (about 700,000 TEUs) in 2011. Environmental impacts associated with the delivery of container freight by road will also be reduced as a result.

The Freight Infrastructure Advisory Board (FIAB) report, recently released for comment, confirmed that the transfer of freight from road to rail will require the development of a network of intermodal facilities within the Sydney metropolitan area, and this has been identified as being vital to improving the efficiency of land transport and supporting efficient port operations in Sydney. The report also noted that the existing network of intermodals was inadequate to achieve the 40% goal.

There are four main markets for container movements to and from the port. These are the Port Botany area itself, the inner and middle west, south west and far west. The Port Botany market is one that will

¹ One TEU is equivalent to one twenty foot container. A forty foot container is equivalent to two TEU.

always be served by truck directly due to its proximity to the port facilities. However, the other three areas all have the potential to increase rail utilisation. Each has distinct market areas and this drives the concept of a network of intermodal terminals designed to best serve each market.

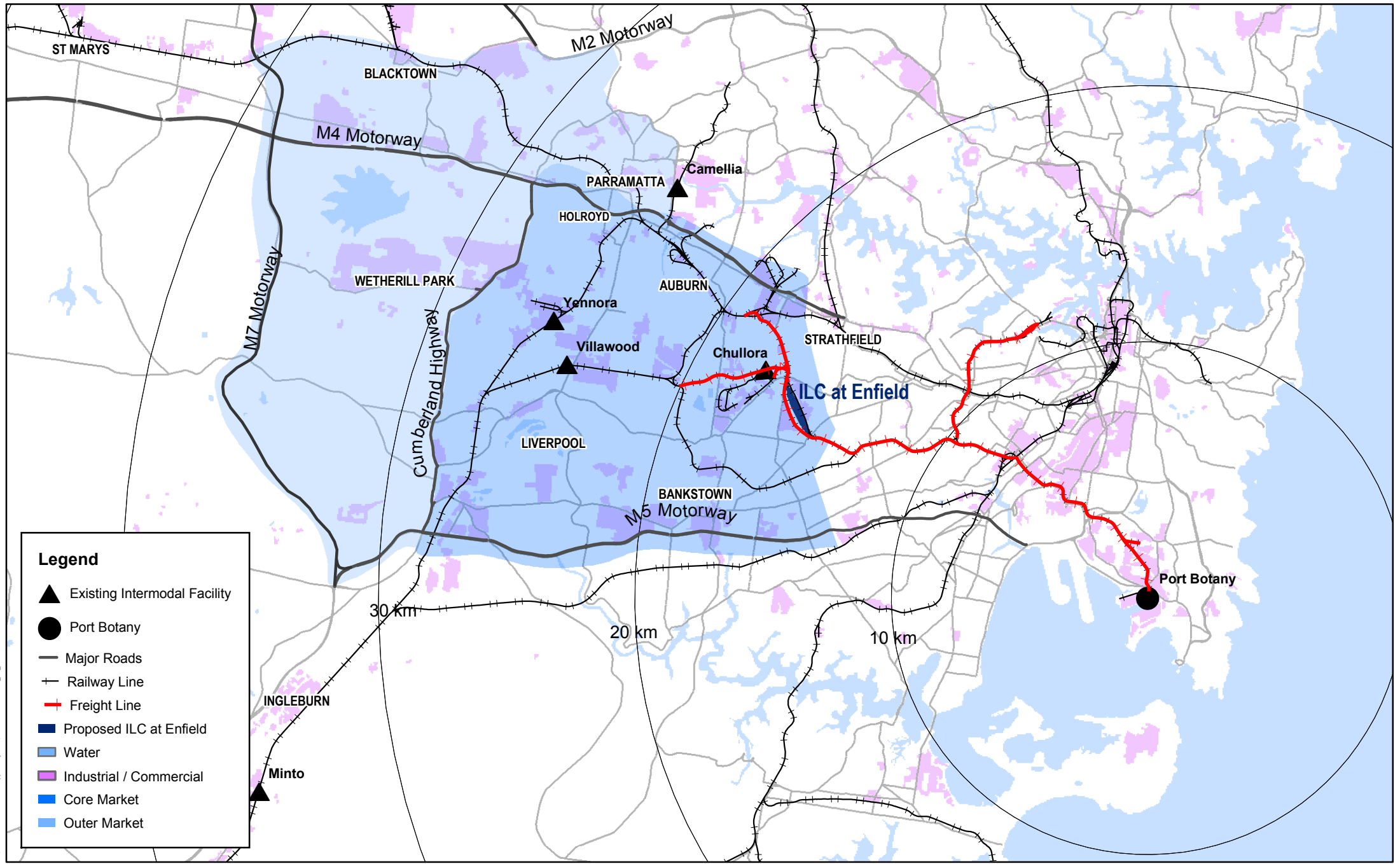
One of the key elements of Sydney Ports' strategy to facilitate the transporting of freight by rail is the establishment at the former Enfield Marshalling Yards of an intermodal logistics centre linked by dedicated freight rail access to Port Botany. An assessment undertaken by CBRE determined the extent of industrial property in Sydney as it may relate to the possible market for an intermodal facility at Enfield. The surveys indicated that some 3,500 ha is located in the inner and middle western Sydney. This is consistent with the share of containers destined for the area (that is, about 700,000 TEUs) and provides evidence of the strength of the market catchment. Sydney Ports has identified the need for a new intermodal facility to service the inner and middle western suburbs of Sydney (shown in **Figure 1**), and identified the most appropriate location for that facility to be at the site of the former Enfield Marshalling Yards.

The location of the proposed ILC, Port Botany and the freight rail network is shown in **Figure 1**. Such a facility at that location would contribute to:

- The distribution network for imports and exports whose origin or destination is in the inner and middle western suburbs of Sydney;
- The Government's requirement for a shift in mode share from road to rail in relation to Port Botany;
- A reduction in the growth of truck movements on road networks between Port Botany and western Sydney;
- Environmental improvements associated with reduced truck movements, especially greenhouse gas emissions; and
- Job creation and wider economic benefits, both locally and regionally.

History of the Project

Since 1998, Sydney Ports has considered the former Enfield Marshalling Yards as a suitable site for the development of an intermodal terminal, which is used for rail to road container handling and transfer. Consequently, following the construction of the new marshalling yards located immediately to the west of the site, Sydney Ports purchased the remaining site progressively between 2001 and 2003. Sydney Ports began development of the project in 2001, but that study was stopped when the NSW Government set up a review of the project, undertaken by the Hon. Milton Morris AO. The Milton Morris review concluded in 2003 that the Sydney Ports proposal at that time was too big for the site and that any intermodal terminal development should be in the context of the demand for a network of intermodal sites throughout the Sydney metropolitan area.



Map Source: Land Use Data Supplied by SRA, File Name: EN01709_Ac_0101.mxd



Figure 1
Regional Context
Freight Rail Network and Market
Catchment for Proposed ILC at Enfield

Sydney Ports has reviewed its 2001 concept and now provides, in line with the recommendation of the Milton Morris review, a more integrated site development, based around a smaller intermodal terminal linked to on-site empty container storage facilities and port related warehousing, more appropriately referred to as an Intermodal Logistics Centre (ILC).

The establishment of an ILC at this location is part of Sydney Ports' strategy for responding to the predicted growth in container trade at Port Botany. This is also consistent with the Freight Infrastructure Advisory Board (FIAB) report and the findings of the Milton Morris Review.

Alternative Sites Considered

Alternative sites were assessed for locating an ILC able to service the market area of inner and middle western Sydney. A number of sites within the catchment area were considered. These comprised existing intermodal terminals in the catchment area (**Figure 1**) and other sites located at existing rail infrastructure.

The former Enfield Marshalling Yards is considered the most appropriate site to service the market catchment shown in **Figure 1** as:

- It is located within the market catchment it would serve;
- It has a dedicated freight rail line to Port Botany;
- It is served by the arterial road system, allowing the distribution of freight from the site to follow main roads such as Roberts Road, Centenary Drive, Hume Highway, the M4 Motorway and the M5 Motorway;
- The land area available is level and adequate to cater for intermodal, warehouse and container storage facilities;
- Site environmental issues, such as ecology and heritage, can be managed adequately; and
- Industrial development surrounding the site is such that the development would be complementary to surrounding industrial uses and separation of container handling operations from residential development is possible.

Sites in western Sydney, such as St Marys, and in south western Sydney, such as Ingleburn and Minto, are being considered for future intermodal facilities. While these sites, or similar ones in the same area, will be developed, the market for them is still emerging and they will eventually serve the market developing in those areas. It is considered improbable that a container freight operation would carry cargo to those sites by rail, to have it brought back to the inner and middle western areas by truck. These costs would be much greater than direct trucking to the market area from Port Botany.

Overview of the Proposal

The existing former Enfield Marshalling Yards site and its surrounds are shown in **Figure 2**. The proposed ILC would be used for the transfer and storage of container freight to and from Port Botany, packing and unpacking of containers within the proposed warehouses and storage of empty containers

for later re-use or for return to the Port. The layout of the proposed ILC at Enfield is shown in **Figure 3**. It comprises:

- An Intermodal Terminal for the loading and unloading of containers between road and rail and short term storage of containers;
- Warehousing for the packing and unpacking of containers and short-term storage of cargo;
- Empty Container Storage Facilities for the storage of empty containers for later packing or transfer by rail;
- A Light Industrial / Commercial Area developed for uses preferably complementary to operations at the ILC. The area would also act as an interface to adjacent uses along Cosgrove Road;
- A Community and Ecological Area which would provide the opportunity to incorporate ecological enhancement and community activities. The area would also serve as a buffer between operations on the site and residences to the south of the site; and
- Other works, comprising construction of a road bridge over the new Enfield Marshalling Yards for access to Wentworth Street, construction of the rail links from the existing rail freight line to the ILC site and a noise wall on RailCorp land to the north west of the site.

The objectives of the proposal are:

- To contribute towards the achievement of a 40% rail mode share for container transport through the delivery of additional intermodal capacity within close proximity to a significant freight catchment area within the Sydney metropolitan area;
- To create an integrated ILC that will accommodate related freight operations that complement each other;
- To contribute to an existing and future intermodal network that maximises the movement of freight by rail in an efficient and reliable manner;
- To provide greater efficiency in the movement of freight to/from Port Botany, facilitating the growth of port trade as a major contributor to the NSW economy;
- To redevelop under-utilised land for beneficial economic use;
- To reduce the long-term environmental impacts from land-based container transport arising from the predicted growth in port trade, by increasing the proportion of containers transported by rail;
- To minimise the impact of the ILC on the surrounding environment and community; and
- To enhance the quality of the local environment by providing community and ecological benefits on the site.

Approvals Process

The proposed ILC is a Major Project, as defined in *State Environmental Planning Policy (Major Projects) 2005*, and is subject to assessment under the provisions of Part 3A of the *Environmental Planning and Assessment Act, 1979* (EP&A Act) and the *Environmental Planning and Assessment Regulation, 2000* (EP&A Regulation).



Alt. Source: Topographic data supplied by SPC, Air photos BY SPC, Projection: MGA 56; File Name: EN01709_Alt_017b.mxd



Figure 2
Site and Surrounding
Land Use

Part 3A of the EP&A Act provides an assessment and approvals regime specifically tailored for major infrastructure, where the Minister for Planning is the approval authority. Under Part 3A a project application is lodged and an Environmental Assessment (EA) report and a draft Statement of Commitments are prepared and submitted to the Department of Planning (DoP) for public exhibition.

The project, Authority, Council and community responses are assessed by DoP and a draft Director-General's Report is prepared with recommended approval conditions. Authorities and Councils submit recommendations on the draft Director-General's Report which is then finalised with recommendations and submitted to the Minister for Planning for his decision.

Environmental Assessment

The EA has been prepared in accordance with the requirements of the EP&A Act, and specifically the key issues indicated in the Director-General's requirements provided. These key issues are discussed below, and generally indicate that the likely impacts from the proposed ILC are minor, and able to be managed by appropriate mitigation measures.

Road Traffic and Transport

A road traffic and transport study was undertaken to assess the impacts of the proposed ILC on the road network and to provide input to air, noise and social impact studies. The assessment found that the development of the ILC at Enfield would have a minimal impact on the road network during construction and operation.

During construction, the average vehicle activity would be about 29 trucks per day and between 150 and 170 cars (construction staff) per day. Based on the forecast traffic volumes, appropriate traffic management plans would be developed to manage construction traffic during the site construction period.

For the operation of the ILC site, beyond the local roads used to gain access to the site (Cosgrove Road and Wentworth Street), the number of trucks generated by site activities represents less than 1% of the average total traffic on the road network around the site. The assessment found that there would be about 1,160 truck movements into and out of the site per day. The majority of these would be between 6am and 5pm, with a daily peak of 103 movements between 2pm and 3pm.

Although some intersections in the study area are forecast to be at capacity in 2016, this is due to general traffic growth rather than the development of the ILC. Any additional truck activity generated by the development would be concentrated on key arterial roads such as Roberts Road / Centenary Drive, the M4 Motorway and the Hume Highway.

Based on the forecast traffic impact, the proposed mitigation strategies during operation of the site include:

- The development of local area traffic management measures to ensure that trucks travelling to and from the ILC use appropriate routes and do not travel through residential areas. This applies

particularly to the residential area bounded by Roberts Road, Boronia Road and Hume Highway. Detailed measures for this area will focus on the means to prevent trucks travelling to or from the ILC gaining access to those areas, and will be developed in consultation with the RTA, Strathfield and Bankstown Councils and the community. These measures will be implemented prior to operations at the ILC commencing;

- The preparation of appropriate traffic management plans for operational activities generated by the ILC, with consideration of site traffic generation, vehicle access arrangements, vehicle parking requirements and truck management; and
- The investigation of intersection upgrades by the RTA to improve performance for all road users. The upgrade of the Hume Highway / Cosgrove Road intersection is an important intersection for the efficient operation of the ILC and for general traffic.

Rail Transport

It is NSW Government policy to increase the Port Botany rail mode share to 40%, and the report of the FIAB supports the development of the ILC as an integral element in achieving that 40% target. Achieving the target will be contingent on other factors (identified in the FIAB report), including:

- Additional intermodal terminals beyond Enfield in the south west and far west of the Sydney metropolitan area;
- the dedicated freight line passing through Enfield;
- rail operation efficiencies; and
- infrastructure enhancement.

Rail freight movements from Port Botany along the dedicated freight line between Port Botany and Enfield comprise about 28 per day, about 50% of the rail freight movements in that corridor. By 2016, when the ILC achieves its capacity of 300,000 TEUs throughput, freight train movements on the line will total about 134 per day, comprising 94 to/from Port Botany. Of the 134, between 10 and 20 (average about 16 or 12%) will deliver and pick up freight from the ILC at Enfield. Regardless of whether the ILC is constructed, the freight train movements on the dedicated freight line would still be about 134 per day.

Sydney Ports is committed to working with those agencies responsible for the management and operation of the rail freight networks to address any environmental issues associated with the transport of freight on the line.

Soils and Groundwater

Some elevated levels of heavy metals and hydrocarbons have been identified in soils located across the site. However, these are below the accepted criteria, and no remediation is required for most of the site. No widespread contamination of the site was identified through the intrusive investigations, although contamination ‘hotspots’ are known to occur. These areas will be remediated according to the requirements of State Environmental Planning Policy (SEPP) 55 – Contaminated Land.

Two groundwater aquifers exist on site, a perched aquifer and a deeper, natural aquifer. The groundwater within both aquifers contains elevated concentrations of heavy metals, although these levels do not currently pose a risk of adverse environmental impacts occurring. While fill materials may contribute to these concentrations within the perched aquifer, the contamination within the natural aquifer is thought to originate from off-site sources. Capping of the ground surface by the development of the ILC would prevent infiltration of water into the fill and limit mobilisation of contamination within.

No negative impacts with respect to soils, contaminated land or groundwater are anticipated as a result of this proposal. Beneficial impacts are likely to result through remediation of contamination 'hotspots' and through site capping.

Hydrology and Hydraulics

The hydrological and hydraulic assessment demonstrated that the development would have little or no discernible impact on the environment, provided that the proposed mitigation measures are incorporated into the design.

The key feature of the internal drainage system would be the arrangement of the site catchments so that the drainage from the main ILC hardstand area is conveyed to a single point of control at the southern end of the site. Here, the potential flooding and water flow would be addressed using the detention basins and associated infrastructure. A detention basin of 33,450 m³ comprising of separate detention and water quality basins would be required at the southern end of the site. Another basin of 2,000 m³ would be required on the eastern side of the site. The sizing of the basins is likely to be optimised at the detailed design stage.

Water Quality and Erosion Control

During construction (especially earth moving works), the potential exists for sedimentation of receiving waters to occur. Erosion control processes will be implemented, in accordance with standard guidelines, to manage the potential impacts from this activity.

Water quality treatment has been proposed that would treat the first flush runoff from the developed ILC site. This would improve the water quality in the runoff from the site to Cocks Creek. Stormwater runoff originating in the northern sector would also be subject to water quality controls to ensure that water quality is maintained or improved. Monitoring would be undertaken to validate that the water quality management devices on site are functioning as expected.

Noise and Vibration

A noise and vibration assessment was undertaken to assess the effects of both construction and operational activities from the site.

Activities undertaken on the site during both the construction and operation stage of the project would cause ground vibration. The types of activities carried out on site during the construction and operation stage are unlikely to cause significant ground vibration beyond 25m from the source. The nearest

potentially affected residential premises to the proposed ILC are approximately 50m away. Therefore, it is unlikely that ground vibration will be an issue on this site.

The major operational noise emissions from the site were found to be the idling of trains and plant operating in the northern end of the site. Noise emission from the site, with the application of noise mitigation measures such as the provision of noise barriers at the north western and south eastern sides of the site and the implementation of controls on noise generating equipment, would comply with the amenity noise criteria under calm-isothermal conditions at all receivers. Under the most adverse wind conditions (i.e. wind blowing from source to receiver), for both the amenity and intrusiveness assessments, exceedances of the noise criteria may occur. These occurrences would be irregular and mitigation measures would be put in place to manage any impacts which may result.

Noise generated by construction activities may potentially exceed criteria set for construction noise, depending on the duration of construction activities. Where noise exceedances are likely, suitable noise mitigation measures would be implemented to reduce construction noise emission as close as possible to compliant levels.

Future road traffic noise levels would comply with the relevant NSW criteria at all assessment locations.

Air Quality

The construction air quality assessment shows that, with the prescribed mitigation measures in place, the ambient air quality criteria for particulate matter and deposited dust would be met around the site borders. This would be assessed during the construction phase by real-time monitoring at sensitive sites and should the criteria be in danger of being exceeded, additional work control activities to manage the dust levels would be put in place.

The air quality assessment of the operations phase concluded that, with emissions from an at-capacity ILC site, the risk of air quality impacts is very low, from both off-site and on-site sources. From on-site sources, air quality levels for particulate matter (PM₁₀) and total suspended particles (TSP) met the ambient air quality criteria for these parameters. Off-site, the assessment of the air quality impacts from increases in vehicle traffic indicated that only marginal increases in PM₁₀ and NO₂ concentrations would be expected, and these are much less than the criteria for those parameters.

The proposed ILC will result in an annualised 2016 relative reduction in CO₂ emissions of 993 tonnes per year within the Sydney airshed. This relative reduction in fuel use and greenhouse gas emissions as a result of the project is in line with NSW Government strategies.

Flora and Fauna

The ILC site represents a highly disturbed and modified environment that provides habitat to a number of common, disturbance tolerant flora and fauna species. Within the areas of likely disturbance, the habitats and vegetation communities present are considered to be of low ecological value. The ILC proposal is not considered to affect, threaten or have an adverse impact on any of those plants or

animals listed under schedules of the *Threatened Species Conservation Act, 1997* (TSC Act) or the *Environment Protection and Biodiversity Conservation Act, 1999* (EPBC Act).

The ILC site does, however, provide marginal habitat for the Green and Golden Bell Frog. The creation of a Frog Habitat Area would minimise the impact of any further disturbance or habitat loss that may result from the development of the ILC site. The development of the ILC site provides an opportunity to ameliorate adverse impacts on Green and Golden Bell Frogs that may exist in the area. The development of secure habitat sites and the linking of the Frog Habitat Area to other Green and Golden Bell Frog sites nearby is consistent with the aims of the Green and Golden Bell Frog Draft Recovery Plan (DEC, 2005).

Land Use

The proposed ILC development is to be undertaken within the boundary of the existing site owned by Sydney Ports, and the opportunities for impact on land use are therefore limited. Existing site leases for Toll Australia and the wheel lathe area operated by Pacific National will be unaffected, other than the change in access arrangements.

Construction and operational road traffic movements which have the potential to impact on land use will be managed through the implementation of appropriate traffic management plans. The proposal would not contribute to any land use impacts along the dedicated freight rail line to Port Botany.

The presence of an intermodal facility in this area has the potential to influence the composition of industrial and commercial businesses in the vicinity of the site. The area is, however, predominantly industrial and changes to individual businesses within the surrounding industrial zones would have a negligible impact on land use. Land use benefits would arise through rehabilitation of the southern end of the site through the possible reuse of the Tarpaulin Factory building and creation of a Community and Ecological area. The future use of the Tarpaulin Factory would be subject to separate consideration.

European Heritage

An assessment of the heritage value of the site and the remaining structures was undertaken. No items currently on the site are listed as of heritage value on any State or Commonwealth register.

The assessment identified two items of State significance (Tarpaulin Factory and Pillar Water Tank) and three items of local significance (Pedestrian Footbridge, Wagon Repair Shed and Yard Master's Office) on the former Enfield Marshalling Yards. Options have been developed for the two items of State significance to be retained on the ILC site, where they will be subject to on-going maintenance. This provides an opportunity to preserve their values for future audiences. The items of local significance which can be relocated, the Pedestrian Footbridge and gantry crane associated with the Wagon Repair Shed, would be offered to a railway heritage organisation. There may also be an opportunity for use of part of the Pedestrian Footbridge on site. The Wagon Repair Shed would also be offered to a heritage organisation. If it is not required, it would be recorded and demolished. The Yard

Master's Office has had its railway heritage reduced significantly by extensive alterations. It has no potential for re-use and would be recorded and removed from the site.

Indigenous Heritage

The site has been extensively disturbed through its use as the former Enfield Marshalling Yards and no natural soils are thought to remain on the site. As a result, there are no indigenous heritage constraints for development of the site and no further indigenous heritage assessments for the site would be required as part of the detailed design.

Visual Impacts and Landscape

The proposed ILC would be located on a site that has been subject to industrial activities for over 90 years. The immediate surrounds are also largely industrial, with some residential areas in Greenacre, Belmore and Strathfield South. The site development would generally be in keeping with the existing character of the area. Some relatively high and/or bulky structures would, however, increase visibility of the site beyond its current levels.

The views to the site from 19 locations were assessed. Most of the residential areas with potential views to the site would be subject to low impacts as the change to the landscape created by the development would be minimal.

The most prominent views of the development would occur from some of the industrial areas on the eastern and western sides of the site. The visual impacts in these areas are regarded as relatively low because of the low visual sensitivity and the compatibility of additional industrial elements with the existing industrial landscape.

A range of landscape measures has been proposed to reduce the visibility of the development and improve landscape amenity. The most notable of these is the establishment of a Community and Ecological Area on the southern part of the site. This would provide a large area with improved amenity that would be prominent from Punchbowl Road and properties along the southern part of Cosgrove Road.

A light spill assessment was undertaken and identified that the light spill on the neighbouring areas would be virtually undetectable. Lateral light spill and glare is minimised as the light fittings focus illumination downwards.

Socio-Economic Impacts

The Local Government Areas of Strathfield, Bankstown and Canterbury are characterised in the 2001 Australian Government Census data by their high ethnic diversity and similarities in levels of private home ownership, median ages and household size. Strathfield has the highest scoring of socio-economic advantage of the three. Canterbury and Bankstown have relatively high levels of unemployment.

There are a number of schools and the Councils maintain a range of community facilities within the local area. None of these would be directly affected by the proposal. The key benefit provided by the proposed ILC site at Enfield is the potential for employment it creates during the construction and operation phases, as well as the potential it provides for stimulation of commercial and light industrial activities within the surrounding industrial area.

On a regional scale, the proposed ILC at Enfield would contribute to the reduced growth of freight traffic from the road system, providing a relative reduction in heavy vehicle traffic and associated air quality, noise, congestion and amenity impacts.

There are, however, a number of issues that concern members of the local community. The key issues raised were associated with the actual or perceived traffic increases on the local roads and the associated safety, noise and air quality impacts. Although the proposal would lead to a relative reduction in heavy vehicle traffic across the Sydney metropolitan area, there may be some minor traffic increases on certain arterial roads in close proximity to the site. However, these movements do not represent a significant adverse impact and would be mitigated through the development of appropriate traffic management plans.

The residential area bounded by Roberts Road, Boronia Road and Hume Highway will be subject to traffic management plans agreed with the RTA, Councils and the community, to ensure that truck traffic related to the ILC does not move through the area.

Air quality and noise associated with truck and train movements and the 24 hour operation of the site were also raised regularly by community stakeholders. Air quality studies identified that there would be no negative air quality impacts through construction and operation. Noise mitigation, including at source measures and acoustic barriers, would be required to ensure that sleep arousal criteria are achieved and to minimise the impacts of site operations on the local residents along Cosgrove Road and Roberts Road.

Environmental Management

Environmental management issues addressed within the study comprise:

- Waste management. Waste streams and possible volumes were identified, with strategies to manage waste issues identified;
- Energy and greenhouse issues. Opportunities for minimising energy consumption on the site were identified and will be considered further at detailed design phase. Greenhouse gas emissions were assessed in the context of fuel savings by a reduction in truck container movements on the road network due to the transfer of freight to the rail network;
- A draft State of Commitments has been provided in the EA. These generally summarise the environmental management and monitoring proposed by Sydney Ports and/or its contractors and operators. The environmental management measures and monitoring requirements were identified and summarised in the context of a further ESD assessment (to be undertaken by Sydney Ports at

the detailed design stage) and draft Environmental Management Plans for construction and operation of the site.

Project Justification

The proposed ILC at Enfield is justified in strategic terms in that it would contribute to the NSW Government's requirement for a shift in mode share to 40% by rail for container transport to and from Port Botany, and the development of an intermodal network in the Sydney metropolitan area to support this. It would do this by providing a distribution network for container imports and exports whose origin or destination is in the inner and middle western suburbs of Sydney. The project would assist in a reduction in the rate of growth of truck movements on road networks between Port Botany and western Sydney and an improvement in environmental conditions associated with reduced truck movements, especially in terms of greenhouse gas emissions.

The project is justified in the manner proposed, having regard to biophysical, social and economic considerations, including the principles of ecologically sustainable development (ESD), in that:

- From the range of factors assessed it is considered that development of the proposed ILC would have an overall positive impact on the biophysical and social environment. It would provide new habitat for the Green and Golden Bell Frog, and have very few negative impacts on the biophysical environment in that air, water, noise and the natural environment would be effectively managed. There would be very few negative impacts on the local culture and way of life. The social aspects of visual, air quality and noise impacts would be managed and a community resource would be provided through provision of a Community and Ecological Area; and
- It would make a positive contribution to the growth that is occurring in the western Sydney regional economy. In particular, it will facilitate the rapid movement of imports and exports, a central tenet of forecast western Sydney growth. Industries targeted for growth in western Sydney are reliant on the types of efficient international transport links that would be provided by the ILC. The economic benefits from the proposal would include significant business turnover and household income and employment generation.

In preparing this EA, the potential environmental impacts from the proposed activities have been investigated and a range of mitigation measures developed to minimise any adverse effects. All mitigation measures proposed in the EA have been developed based on the principles of ESD. It is clear that the principles of inter-generational equity and conservation of biological diversity are met and, if there is any doubt about potential detrimental effects on the environment, a precautionary approach has been applied. Further assessment against ESD principles will be undertaken during the detailed design of the project.

Conclusions

To assist in handling the projected increase in container freight, the NSW Government is seeking to increase the proportion of container freight carried by rail to and from Port Botany. It aims to increase the proportion of containers transported to and from Port Botany by rail to 40% by 2011. Achieving this goal will result in an increase in rail transport from about 21% of the current 1.27 million TEUs

through Port Botany (about 275,000 TEUs) to the goal of 40% of the projected 1.75 million TEUs (about 700,000 TEUs) in 2011. This transfer of freight from road to rail will be achieved by the development of a network of intermodal facilities within the Sydney metropolitan area. One of the key elements of the strategy to facilitate the transporting of freight by rail is the establishment at the former Enfield Marshalling Yards of an Intermodal Logistics Centre (300,000 TEUs throughput), linked by dedicated freight rail access to Port Botany. The location of the proposed ILC will service the inner and middle western suburbs of Sydney. The environmental impacts associated with this development were assessed under Part 3A of the EP&A Act through the preparation of an environmental assessment (EA). The EA has demonstrated the benefits associated with the development of the ILC, and these include:

- A significant contribution to the NSW Government target of achieving 40% rail mode share of container traffic by 2011;
- A reduction in the rate of growth of truck movements on the road network (expressed as vehicle kilometres travelled) which in turn will have a benefit in terms of a relative reduction in greenhouse gas generation by fuel consumption. This reduction in growth rate will also have benefits associated with air quality, noise and amenity;
- A positive contribution to the growth that is occurring in the western Sydney regional economy by facilitating the rapid movement of imports and exports. The economic benefits from the proposal would include significant business revenue and household income and employment generation;
- The provision of new habitat areas for the Green and Golden Bell Frog in the Greenacre / Enfield area and the provision of a community area at the southern end of the site;
- The management of potential biophysical and environmental impacts such that mitigation measures implemented during construction and operation will reduce those impacts to a minimum;

It is concluded that the development of the proposed Intermodal Logistics Centre at Enfield:

- Is justified in terms of addressing NSW Government policy aims in terms of increasing rail mode share for container freight from Port Botany;
- Is justified in providing social and environmental benefits for the general community, while managing any potentially negative impacts by providing appropriate management measures;
- Is justified in economic terms in providing a substantial financial benefit to the community through economic activity and employment generation. Social and environmental benefits were also quantified in economic terms; and
- Would not affect the health, diversity and productivity of the environment and would assist in these elements being maintained for the future benefit of generations.