



Planning &  
Environment

***MODIFICATION REQUEST:  
Enfield Intermodal Logistics Centre***

***New masterplan, including change of use  
and operations for some precincts***

***MP05\_0147 (MOD 14)***



Secretary's Environmental Assessment Report  
Section 75W of the  
*Environmental Planning and Assessment Act 1979*

August 2018

Cover photograph: Photomontage of Project (source: Modification Report 2018)

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## 1. BACKGROUND

The Enfield Intermodal Logistics Centre (Enfield ILC) is located between the Enfield Marshalling Yard adjacent to Wentworth Street, and Cosgrove Road, Strathfield South. The Enfield ILC site area is approximately 59 hectares (ha), including a community and ecological area (CEA) at the southern end of the site (including dedicated Green and Golden Bell Frog habitat).

The Enfield ILC was approved by the Minister for Planning under Part 3A of the *Environmental Planning and Assessment Act* (EP&A Act) on 5 September 2007. The approved project includes an intermodal terminal (IMT), warehousing, empty container storage area, light industrial/ commercial area fronting Cosgrove Road and a road bridge over new marshalling yards providing access to Wentworth Street. The approved project consists of construction and operation of the ILC with capacity to accept a maximum throughput of 300,000 twenty-foot equivalent units (containers) per annum. The existing project approval allows for 69,300 m<sup>2</sup> gross floor area (GFA) of warehousing and 40,989 m<sup>2</sup> GFA of light industrial/ commercial uses. **Figure 1** shows current land uses within the site.

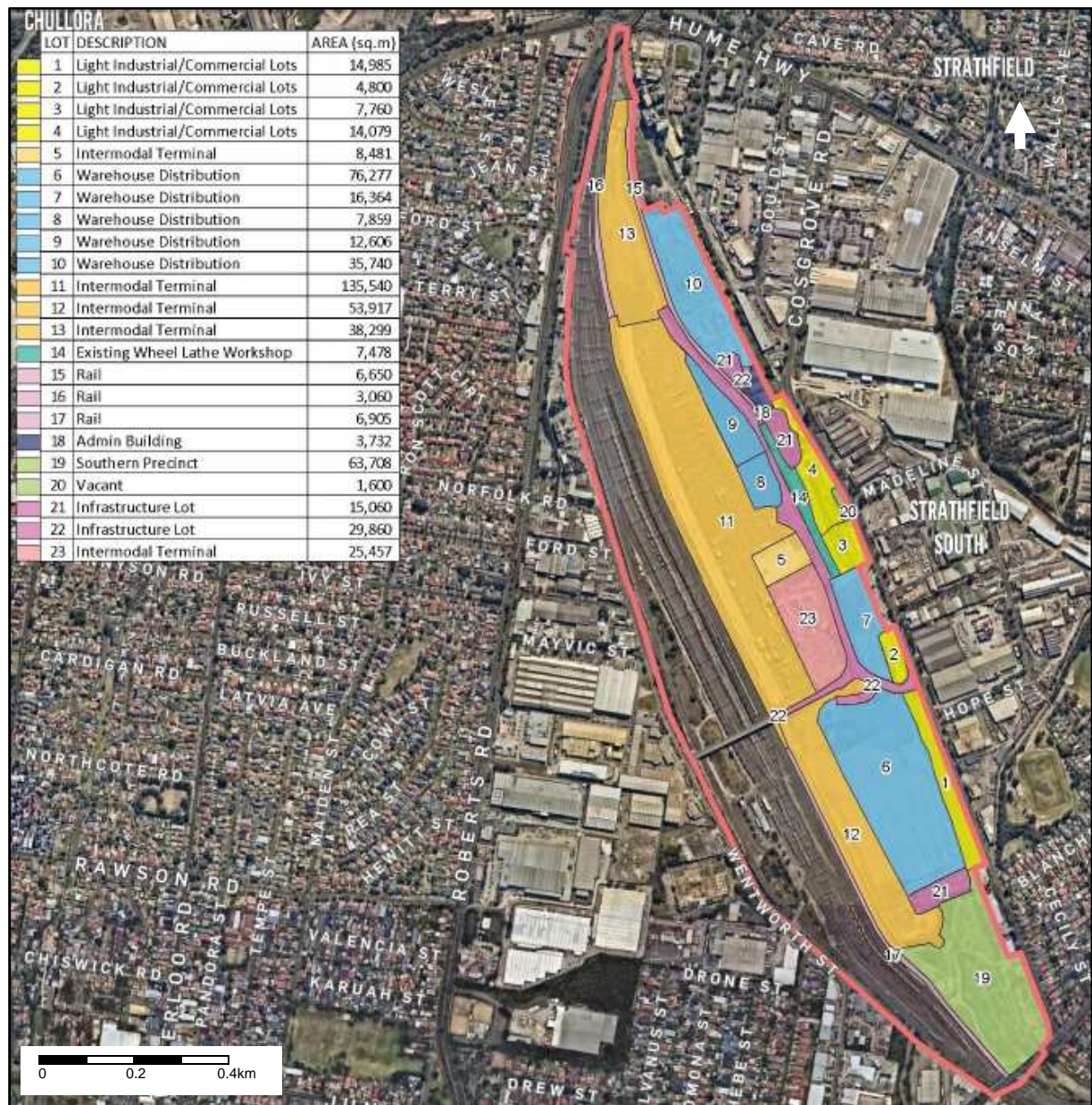
Development of the site has progressed since the original approval was provided. Works completed included the road bridge, noise walls, rail sidings and asphalt paving to the IMT area, construction of frog ponds, completion of internal roads and infrastructure including the installation of mains power, sewer, and water to the site.

Fourteen applications have been submitted to modify the Project Approval (MP 05\_0147) since determination. The project approval has been modified on nine occasions and is also the subject of two other modification applications yet to be determined. **Table 1** provides a summary of the modifications.

**Table 1: Summary of Modifications**

No.	Description	Status
MOD 1	Amend conditions relating to construction dust monitoring	7 October 2008
MOD 2	Amendment to conditions to enable staged construction and operation and modified timing of submission of Site Audit Statements	30 March 2009
MOD 3	Replace approved warehouse with a car load/unload facility.	Withdrawn
MOD 4	Amendment of conditions relating to noise walls, internal roads, stormwater detention, development areas and site layout.	27 May 2010
MOD 5	Relocation and reuse of unsuitable material to the southern part of the site known as Mount Enfield	10 November 2011
MOD 6	Inclusion of the former Toll Lease Area into the project site, adjustments to site layout, subdivision and changes to meteorological monitoring	11 December 2012
MOD 7	Modify the subdivision of the ILC site.	Withdrawn
MOD 8	Amendment of the subdivision layout into 23 allotments to facilitate commercial leasing.	27 November 2013
MOD 9	Proposed use of Site F for agricultural and forestry commodities storage and handling facility.	SEARs issued
MOD 10	Amendment to freight-related operational activities within the intermodal terminal.	On hold
MOD 11	Proposal to establish an additional warehouse (warehouse G) in the Southern portion of Area G (Lot 23).	8 February 2017

No.	Description	Status
MOD 12	Modification to extend existing rail sidings, including expansion of administration building for the intermodal terminal.	7 March 2017
MOD 13	Modification for earthworks, remediation and materials transfer to facilitate development under DA 2016/132 within the Tarpaulin Factory area	19 June 2018
MOD 14	The subject of this report.	Under assessment



**Figure 1 Current ILC Landuses**  
(source: MOD 14 Application 2018)



## 2. PROPOSED MODIFICATION

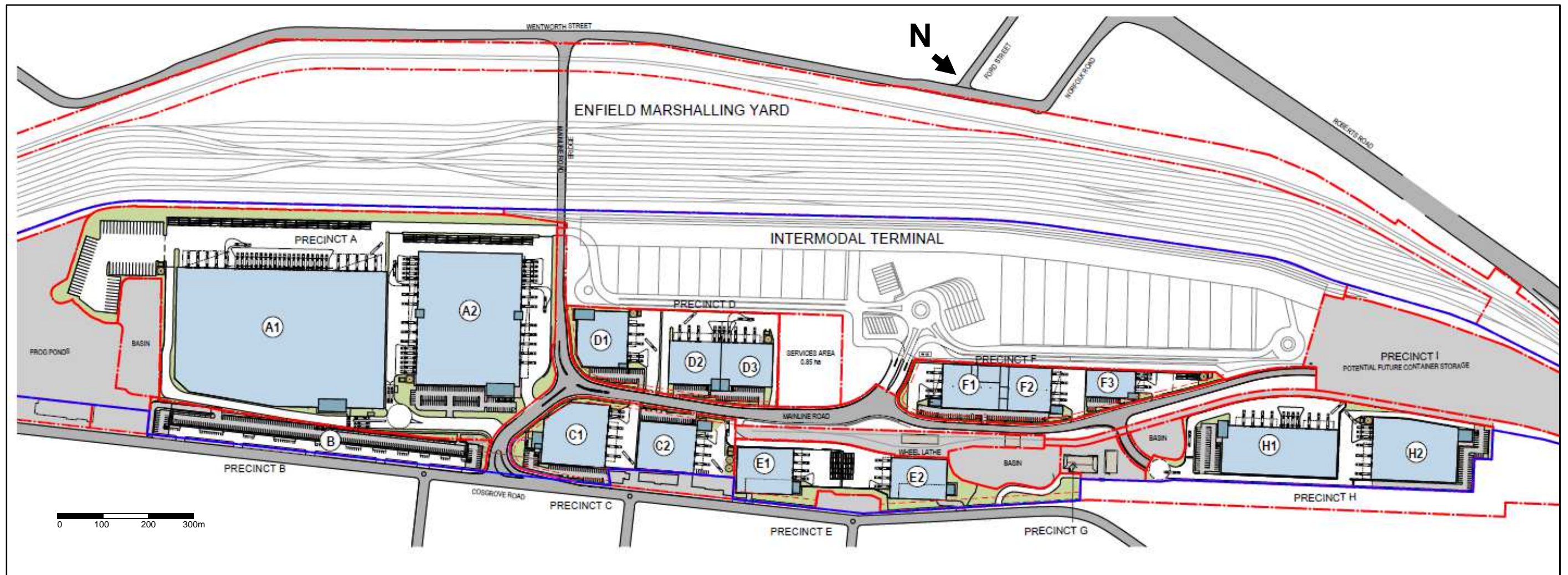
The proposed modification comprises:

- amended warehouse precincts and layouts
- increase in combined warehouse and light industrial gross floor area (GFA) by approximately 15,340 m<sup>2</sup> to 125,630 m<sup>2</sup>, including conversion of approximately 33,600 m<sup>2</sup> of the 40,989 m<sup>2</sup> GFA of approved light industrial/commercial uses to warehousing and distribution uses, and reduction of light industrial/commercial GFA from 40,989 m<sup>2</sup> to 7,384m<sup>2</sup>
- increase in the number of warehouses from seven to 13
- increase in combined carparking facilities and loading bays by 304 to 816
- increase in height of warehouses from 12 m to 13.7 m
- removal of the restriction on use of warehousing, other than Precinct A and D
- allowing truck-to-truck freight movements in Precincts C, E, F and H
- extension of operating hours to 24/7 in Precinct E and over the entire footprint of warehouse C1
- demolition and earthworks, including importation of 52,425 m<sup>3</sup> of fill.

The proposed masterplan for the site, including proposed warehouse layout, is shown in **Figure 2**. A breakdown of the site area into the proposed precincts is provided in **Table 2**.

**Table 2: Site area**

Precinct	Lot Number	Site Area (m <sup>2</sup> )	Warehouse GFA (m <sup>2</sup> )
A	6, 12	130,249	62,600
B	1	14,979	7,384
C	2, 7	21,170	10,487
D	23	25,469	11,460
E	3, 4	18,613	7,604
F	8, 9	20,759	9,620
G (former Toll lease area)	18	3,741	<i>No change</i>
H	10	35,783	16,475
I (empty container storage area)	13	38,116	<i>N/A</i>
<b>Total</b>		<b>308,879</b>	<b>125,630</b>
<b>Other</b>		<b>Approximate Site Area (m<sup>2</sup>)</b>	
Intermodal terminal & railway	-	146,100	-
Service area	-	8,500	-
Wheel lathe & railway	-	14,700	-
Roads	-	29,800	-
Ecological zones	-	67,200	-
Basins	-	15,100	-
<b>Total</b>		<b>281,400</b>	



**Figure 2: Masterplan**

Source: Modification Report — MP05\_0417 Enfield Intermodal Logistics Centre (MOD 14) (Urbis 2018)

### 3. STATUTORY CONTEXT

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#### 3.1. Section 75W and modification of the Minister's approval

The Enfield ILC is a transitional Part 3A project under Schedule 2 to the EP&A (Savings, Transitional and Other Provisions) Regulation 2017. As the modification request was lodged before 1 March 2018 (cut-off date for modifications under section 75W), the Minister (or his delegate) may determine the application under the former section 75W of the EP&A Act.

#### 3.2. Delegated authority

The Minister for Planning is the approval authority for the application. However, on 11 October 2017, the Minister for Planning delegated his powers and functions to determine s75W modification requests to senior executive officers of the Department of Planning and Environment in cases where:

- the relevant council has not made an objection; and
- a political donation has not been made; and
- there are less than 25 public submissions objecting to the modification.

The proposed modification meets the terms of this delegation for the Director, Social and Other Infrastructure Assessments to determine the application.

### 4. CONSULTATION AND SUBMISSIONS

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#### 4.1. Exhibition

Under Schedule 4 of the EP&A (Savings, Transitional and Other Provisions) Regulation 2017, the modification is required to be made publicly available. The modification request was notified in the Canterbury Bankstown Express and the Inner West Courier, and exhibited for 30 days between 28 March 2018 and 26 April 2018 (inclusive) on the Department's Major Projects website and at:

- the Department's office at 320 Pitt Street, Sydney
- NSW Service Centres
- Strathfield Council Customer Service Centre at 65 Homebush Road, Strathfield.

No public submissions were received.

The Department consulted with City of Canterbury Bankstown Council, Environment Protection Authority (EPA), Office of Environment and Heritage (OEH), and Transport for NSW (TfNSW) / Roads and Maritime Services (RMS). The Department also referred the modification to Strathfield Council for comment; however, Council did not provide a submission. A summary of the issues raised in the submissions is provided at **Table 3**.

#### 4.2. Public authority submissions

**Table 3: Summary of public authority submissions**

<b>Environment Protection Authority (EPA)</b>
<p>EPA provided the following comments:</p> <ul style="list-style-type: none"><li>• air quality conditions should require best practice for emissions</li><li>• meteorological conditions under which noise is to be predicted and assessed should be clarified</li><li>• recommendations that:<ul style="list-style-type: none"><li>○ State Environmental Planning Policy No 55—Remediation of Land be used to assess the suitability of land and remediation required</li><li>○ a remediation action plan (RAP) be prepared in accordance with appropriate guidelines</li><li>○ a site auditor be engaged to issue a Section 4 site audit statement</li><li>○ ensure that there were no risks from the works to pre-existing contamination at the site</li><li>○ work be conducted by certified consultants</li><li>○ if contamination trigger levels were met there was a duty to report the contamination to the EPA under section 60 of the <i>Contaminated Land Management Act 1997</i></li></ul></li></ul>



<ul style="list-style-type: none"> <li>○ any waste generated at the site should be classified and disposed of to a lawful waste facility.</li> </ul>
<b>Office of Environment and Heritage (OEH)</b>
<p>OEH provided the following comments:</p> <ul style="list-style-type: none"> <li>• the project approval should be modified to require actions in the Proponent's supplementary letter advice dated 10 January 2018 (Biosphere Consultants) be incorporated within the CEMP and OEMP</li> <li>• the CEMP should include mitigation measures to help protect Green and Golden Bell Frog and habitat area. These include exclusion and silt fencing, dust suppression, run-off barriers, installation of visual screens for light spill, and demarcation of frog habitat as 'no go' areas</li> <li>• the CEMP/OEMP should identify those responsible for organising and conducting mitigation measures and how they would be monitored and recorded. Deficiencies should immediately be rectified</li> <li>• procedures are required for if a Green and Golden Bell Frog is found on the site</li> <li>• the impact of the proposed modification on flood behaviour and associated implications should be addressed and an emergency response plan put in place to manage floods.</li> </ul>
<b>Roads and Maritime Services</b>
<p>RMS provided the following comments:</p> <ul style="list-style-type: none"> <li>• noted that the Department should consider potential changes to the distribution of traffic due to truck-to-truck movements and the potential for the site to increase vehicle movements on nearby intersections</li> <li>• the Proponent should ensure: <ul style="list-style-type: none"> <li>○ the layout of the basement car park area is in accordance with relevant Australian Standards</li> <li>○ that vehicles enter and exit the site in a forward direction</li> <li>○ vehicles are to be wholly contained within the site before stopping</li> <li>○ bicycle parking on the site should be in accordance with the Australian Standard (Bicycle Parking Facilities)</li> </ul> </li> <li>• a Construction Pedestrian Traffic Management Plan (CPTMP) should be implemented and submitted to TfNSW and RMS for review and approval prior to issue of a construction certificate;</li> <li>• a construction works zone is not allowed on Liverpool Road (also known as Hume Highway), Punchbowl Road or Roberts Road</li> <li>• a road occupancy licence should be obtained from Transport Management Centre for works that may impact on traffic flows on Hume Highway, Punchbowl Road or Roberts Road during construction activities.</li> </ul>
<b>Transport for NSW (TfNSW)</b>
<p>TfNSW provided the following comments:</p> <ul style="list-style-type: none"> <li>• the introduction of truck-to-truck in selected precincts should be subjected to performance measures to ensure that annual freight movements will eventually be undertaken mostly via rail-truck or truck-to-rail</li> <li>• the Proponent should demonstrate a long-term commitment to movement towards intermodal freight transportation.</li> </ul>
<b>City of Canterbury Bankstown</b>
<p>City of Canterbury Bankstown provided the following comments:</p> <ul style="list-style-type: none"> <li>• the cumulative impact of traffic at peak capacity, and whether traffic impacts would worsen when the rail-to-truck operation, truck-to-truck operation and warehouse operation at the intermodal reach peak capacity noted the potential for residential amenity impact related specifically to noise and air quality.</li> </ul>

### 4.3. Response to Submissions

Following exhibition, the Department placed copies of all submissions received on its website and requested that the Proponent provide a response to submissions (RtS) which was received on 8 June 2018 (**Appendix A**).

The Proponent's RtS included the following information:

- air quality management measures would be implemented with an OEMP requiring best practice for emissions controls, maintenance and operation of plant and equipment, and scheduling of truck movements

- dispersion modelling has been conducted on operations at Enfield ILC assessing incremental and cumulative impacts on air quality on nearby residents. Predicted levels are expected to be lower during normal operations of the facility.
- noise and vibration were found to be impacted by temperature inversions
- site works would be subject to a RAP and a final site audit statement (SAS) would be provided once the development is complete
- fill is being imported to Precincts A and H which would raise the site. Existing stormwater infrastructure and detention basins mitigate the potential for flooding, and would not be changed under this modification
- the existing CEMP for the overall site includes mitigation and construction measures for managing frog habitat and populations
- the existing CEMP for the overall site includes provisions for pedestrian management and has been previously approved by the Department. In addition, project specific CEMP/CTMPs would be prepared. Road occupancy licences would be submitted separately when required. SIDRA modelling generally indicates that network performance would be improved and traffic audits would continue under the existing consent.
- traffic audits would continue under the existing approved conditions. This modification request does not propose to alter the already approved traffic volumes, and work within the current approved movements.

## 5. ASSESSMENT

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### 5.1. Key assessment issues

The Department has considered the Proponent's EIS, the issues raised in submissions, the Proponent's RtS and supplementary RtS in its assessment of the proposal. The Department considers the key issues associated with the proposal are:

- traffic and access
- noise
- biodiversity
- soil and groundwater
- built form and visual impact.

Each of these issues is discussed in the following sections of this report. Other issues were taken into consideration during the assessment of the proposal and are discussed at **Section 5.7** of this report.

### 5.2. Traffic and access

The modification proposes the use of warehousing and commercial precincts on the Enfield site independent of the rail component of the project. The reconfiguration of the site would lead to changes in the expected traffic volumes in and out of the site.

#### **Mode share**

Intermodal terminals are key drivers of the NSW Government's commitment to increasing the percentage of freight distribution conducted by rail. The split of freight by transport mode, known as mode share, is an important aspect of freight planning and strategy in NSW. Encouraging rail freight movement is a key element of the NSW Draft Freight and Ports Plan, which forms part of the NSW Government's Future Transport 2056. The Plan acknowledges the rail mode share for containerised freight is increasing: from 13.5% in the 2014/15 financial year to 20.8% in 2017 (up to August). Intermodal terminals form critical hubs in the transport network, allowing containerised goods to be transported closer to their ultimate destinations by rail, and relieve pressure on roads, and the ports themselves.

The project approval for the Enfield ILC site is established on its use as an integrated logistics hub, centred around movement of containerised freight by rail. At present, the project approval

requires all freight movements into and out of new warehouses to have a rail freight component; that is, shipping containers need to be either received or distributed off site via the rail terminal. These types of transport movements are known as rail-to-truck and truck-to-rail movements.

The modification request is, however, predicated on an apparent market demand for warehousing and commercial precincts on the site to be serviced in the immediate term by truck-to-truck movements. The Proponent notes that the eastern part of the site has not been developed; beyond the establishment of internal roads and infrastructure, the warehousing precincts that form part of the project approval, as modified, have not been taken up in the 10 years since project approval. At the same time, the annual throughput for the site remains in the vicinity of 50,000 TEU, which the Proponent acknowledges is 'well below' an approved limit of 300,000 TEU.

The Department considers that the Enfield ILC must remain an intermodal logistics centre. It is clear that this remains NSW Ports' intention too, given the clear message in the Modification Report that the 'long-term objective is to ensure rail freight volumes grow such that rail becomes the predominant transport mode across the Enfield ILC'. The site retains the aspects that the original Independent Hearing and Assessment Panel for the project described as 'in both strategic and local terms ... contribute to its particular suitability to be developed for an intermodal task, namely its location on a dedicated freight line that connects Port Botany with Western Sydney, the flat, generally unencumbered nature of the site, and its location relative to the regional road network.'

At the same time, the Department also accepts that operation of warehousing, commercial and light industrial uses is important to the viability of the site, and acknowledges that development of the warehousing, commercial and light industrial precincts has not been achieved in a timely manner. It is clear that changes to the operational parameters are required to facilitate uptake of the site, and ultimately drive increased container movements to the site.

The Department has considered closely submissions that reiterate the importance of the site in contributing to rail mode share. This is a critical contribution that the 32 operational intermodals in NSW make to the efficiency of our transport networks on a strategic level. And in this respect, the Department has considered that a variant on the recommendations of the TfNSW submission would create a clear pathway to allow warehousing to commence on the site, while pursuing opportunities to ensure rail-to-truck and truck-to-rail movements continue to increase throughout the life of the proposal.

The Department recommends that the Proponent prepare a periodic Intermodal Freight Transportation Report to detail how the Proponent is working to increase the modal share by rail in and out of the site. The report would include:

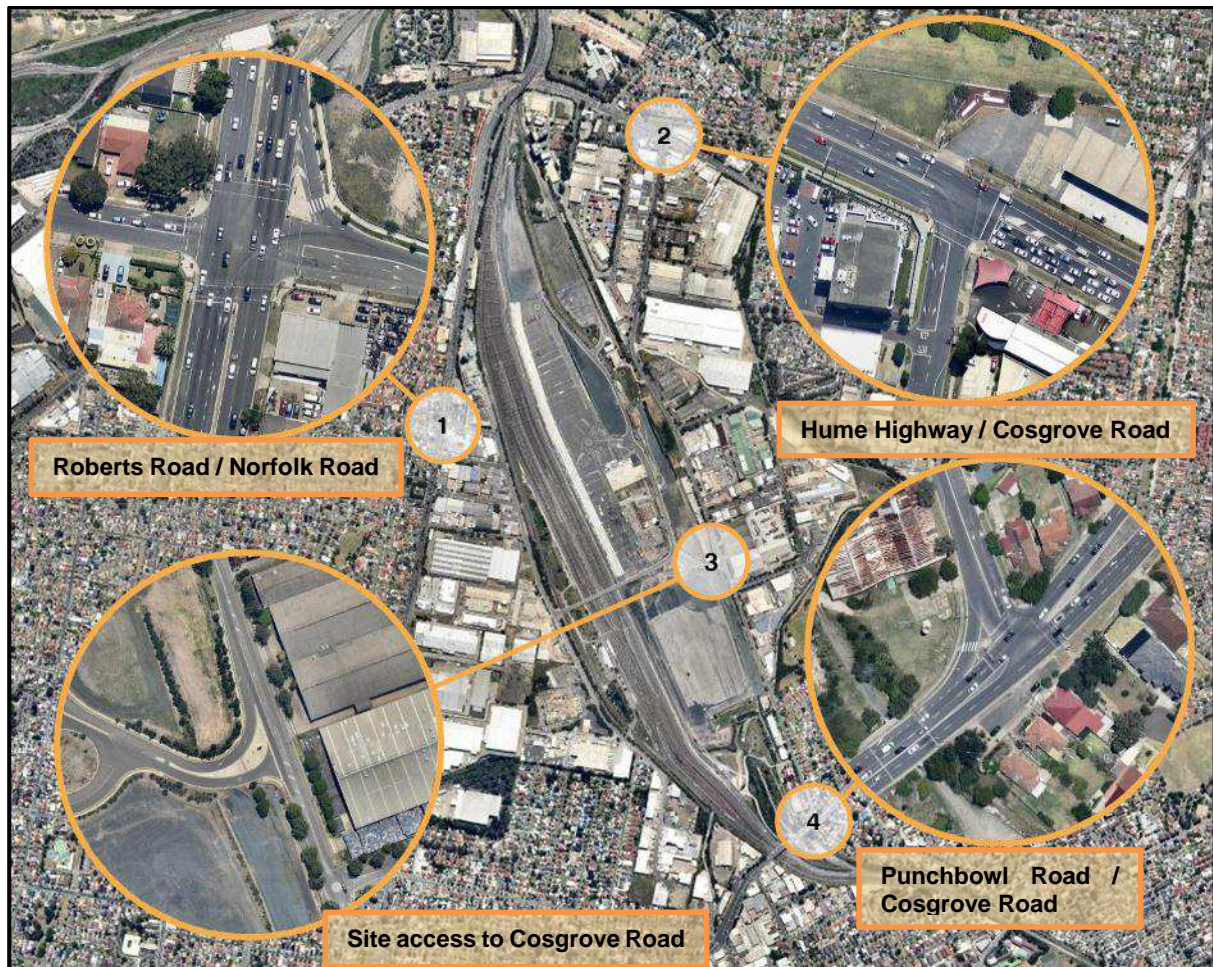
- details of how many shipping containers are received at and dispatched from site
- the split of rail-to-truck/truck-to-rail, and truck-to-truck transport movements
- a detailed analysis of the measures that would be employed to increase the modal split of container movements via rail-to-truck/truck-to-rail
- forecasts for future volumes of rail movements.

The report would be prepared a year from operation of the first warehouse proposed under this modification, and continue every two years after that, except where otherwise agreed. The reports would be provided to the Department, which would review and determine whether any additional operation traffic management measures would be reasonably required.

The Department considers that this monitoring and reporting requirement, combined with the existing operational traffic monitoring and reporting requirements, would ensure that the Proponent continues to pursue increased rail freight volumes to service the site, within an overall framework of managing operational traffic impacts on the surrounding road network. Those impacts are discussed further, below.

### Operational traffic

The traffic assessment identifies the key intersections for accessing the site as Roberts Road/Norfolk Road and Hume Highway/Cosgrove Road intersections. The Roberts Road/Norfolk Road intersection is located to the west of the site, while the Hume Highway/Cosgrove Road intersection is to the east of the site. Currently heavy vehicle traffic exiting the site from Turnout Drive (an internal road) into Cosgrove Road is only allowed to enter by turning right (i.e. heading south from Hume Highway) and exit by turning left (i.e. towards the Hume Highway), effectively restricting heavy vehicle movements along the residential area fronting Cosgrove Road north of Punchbowl Road. Key intersections are shown in **Figure 3**.



**Figure 3: Key local intersections**

Base source: Traffic Impact Assessment (Ason Group, 2018)

**SIDRA intersection performance modelling was conducted for existing (2017) network performance. As discussed above, the Proponent's assessment noted in this regard that the most recent traffic audit report identified that the current annual throughput for the site is approximately 50,000 TEU per annum, against an allowable annual throughput for the approved project application is 300,000 TEUs per annum — that is, the projected annual throughput has not been reached to this point in time. The existing network performance is shown in**

Table 4 below.



**Table 4: Network performance (2017 baseline)**

Intersection	Period	Intersection Delay	Level of Service
Hume Highway/ Cosgrove Road	AM	24.4	B
	PM	37.0	C
Roberts Road/ Norfolk Road	AM	77.0	F
	PM	74.3	F
Punchbowl Road/Cosgrove Road	AM	25.5	B
	PM	27.9	B

Source: Traffic Impact Assessment (Ason Group, 2018)

Note: Level of Service are defined as:

A — Good operation

B — Good with acceptable delays & spare capacity

C — Satisfactory

D — Operating near capacity

E — At capacity; at signals, incidents will cause excessive delays

F — Amount of traffic approaching the intersection exceeds that which can pass it. Flow break-down occurs and queuing and delays result.

The Proponent's traffic impact assessment provided a range of forecast traffic volumes, for the intermodal and Precinct A (based on the original traffic assessment for the Project Approval), for Precinct B (based on traffic generation rates for business parks in the 2002 Guide to Traffic Generating Development), and for the balance of the warehousing based on data for sites presented in Appendix E - Business Parks And Industrial Estates – Site Details And Trip Generation of the Guide to Traffic Generating Developments - Updated traffic surveys – TDT 0213/04a. The Department considers this approach to estimating traffic numbers is acceptable, given that detailed information about proposed tenants is not available, and noting the existing requirements for ongoing traffic audits (see below). The predicted traffic numbers are presented in **Table 5** below.

**Table 5: Estimated approved and predicted traffic volumes**

Use	Approved Project		Project including MOD 14	
	Overall movements (truck movements in parentheses)			
	AM	PM	AM	PM
Intermodal	81 (60)	88 (45)	81 (60)	88 (45)
Warehouses	151 (30)	107 (9)	221 (47)	177 (19)
Light Industrial	169 (5)	169 (10)	77 (3)	77 (1)
Total	401 (95)	364 (64)	379 (110)	342 (65)

Source: Traffic Impact Assessment (Ason Group, 2018)

In summary:

- overall light industrial traffic reduces, associated with the reduction of light industrial land uses on the site
- that reduction is partially offset by a large increase in truck-to-truck warehouse traffic
- the number of trucks increases during peak hours, due to that increase in truck-to-truck warehouse traffic

- there is a small reduction in overall traffic generation.

These volumes were used to inform a SIDRA analysis of future intersection performance. The results of the SIDRA analysis are summarised below.

**Table 6: Network performance (predicted)**

Intersection	Period	Approved Project		Project including MOD 14	
		Intersection Delay	Level of Service	Intersection Delay	Level of Service
Hume Highway/ Cosgrove Road	AM	29.4	C	28.7	C
	PM	71.9	F	68.8	E
Roberts Road/ Norfolk Road	AM	96.1	F	96.4	F
	PM	76.3	F	76.5	F
Punchbowl Road/Cosgrove Road	AM	28.7	C	28.2	B
	PM	29.5	C	29.1	C

Base source: Traffic Impact Assessment (Ason Group, 2018)

The proposed changes to the traffic network volumes would generally reduce the average delays at surrounding intersections except for the Roberts Road / Norfolk Road intersection, with an increase of 0.3 seconds in AM peak and 0.2 seconds in PM peak. This increase is considered to be negligible, given the already degraded performance of the intersection.

The Department agrees with the view that the potential traffic impacts from the operation of the site as modified are unlikely to cause excess congestion on the surrounding road network. However, the Department also agrees Council's submission reiterating the importance of managing traffic performance during operation of the project.

The Department considers that it will be important that traffic for the project, as modified, to be managed effectively. As such, the Department has recommended that the Proponent prepare and implement a Driver's Code of Conduct, to detail traffic management measures during operation. This Code, a requirement on other similar projects, would detail the strategies to ensure impacts on adjoin land uses and the road network would be managed, such as the required routes and access points.

The existing project approval also includes a comprehensive suite of traffic auditing and reporting requirements, to monitor and respond to the operation traffic impacts of the project. These requirements include:

- a Traffic and Capacity Monitoring Program to monitor the throughput and traffic generation of the project
- Traffic Audits based on the project reaching annual throughput of 50,000 TEU, 150,000 TEU and 250,000 TEU.

It is recommended that these requirements should continue to apply to the project as modified. These requirements would supplement the requirements of the Intermodal Freight Transportation Report, and the Department envisages that the requirements of each could be satisfied through combined reporting where appropriate.

### **Construction Traffic**

The Proponent anticipates that a total of 18,354 trucks would be required during construction works. These movements were assessed as part of the original application and it is not anticipated that the predicted numbers would change. The Department understands that approximately 52,425m<sup>3</sup> of fill may be required for the future works. Each truck holds

approximately 18m<sup>3</sup> of material, which would be the equivalent of around 2,910 trucks (5,820 movements). The importation of fill is planned to be phased and therefore the truck movements spread out across the construction period. The proposed phasing is presented in Table 7.

**Table 7: Proposed fill material phasing**

Precinct	Estimated Start Date*	Duration (weeks)	Quantity (m <sup>3</sup> )	Movements per day
C, D, F	May 2018 and August 2019	4 – 8	8,695	40
H	June 2018	4	2,660	12
E	February 2019	4	9,300	44
A, B	March 2020	6 – 8	31,770	74-98

Source: Traffic Impact Assessment (Ason Group, 2018)

It is also noted that the importation of fill is not a new impact of this modification and has been assessed as part of previous applications.

The original CEMP contains a Construction Traffic Management Protocol (CTMP) for the site, which is proposed to be updated prior to the proposed warehouse works. The Department considers that the construction traffic movements are generally in line with those previously approved, and that the phasing of fill material would help to mitigate the impacts of traffic on the surrounding road network and receivers. Ultimately, the Department considers the CTMP can be used to effectively manage construction traffic, subject to its update to reflect the new project layout, and inclusion of a Driver's Code of Conduct, similar to that proposed for operation, to control the routes and access points available for construction traffic.

### 5.3. Noise

In the area of the proposed warehousing, the main noise sources identified are:

- noise from construction works
- operational noise from the warehousing development
- traffic travelling along Cosgrove Road.

The Proponent prepared a noise impact assessment, which assesses the impact of the proposal, as proposed to be modified, at the noise sensitive locations detailed in the original 2005 Environmental Assessment for the project. In some respects, noise attenuation envisaged in the original project approval and subsequent modifications has already been provided. It is noted that existing noise barriers are located at the site (from MOD 6) specifically to reduce the impact on residents, particularly to the south east of the site on Cosgrove Road. The nearest barrier to the warehousing and light industrial areas as proposed to be modified is approximately 70m from the nearest residential receiver.

In assessing this modification, the Department has reviewed construction and operational noise against both the relevant noise policies that apply to the development, and the noise levels approved to apply to the site.

Consideration of construction noise, noise from the use of the site and operational traffic noise is provided below.

#### **Construction Noise**

Noise generated during the construction period would occur during standard working hours, that is 7am to 6pm Monday to Friday, and 8am to 1pm Saturday. No works are allowed on Sundays or public holidays. The main sources of construction noise are identified to be from heavy vehicle movements to, from and within the ILC, loading/unloading and operation of plant and equipment, which would potentially impact on nearby land uses.

Construction noise management levels for the project have been adopted from the *NSW EPA Interim Construction Noise Guideline (ICNG)*. The ICNG recommends construction noise management levels (CNMLs) above the daytime background level plus 10 dBA within standard hours, and a rating background level (RBL) plus 5dBA outside of standard hours. The guideline also presents a highly noise affected level daytime intrusive  $LA_{eq}(15\text{minute})$  noise level of 75 dBA. The CNMLs are presented in **Table 8** below and are based on the daytime project approval 'Maximum Allowable Noise Contribution' noise levels of RBL+5 dBA.

**Table 8: CNML and Highly Noise Affected Level (dBA)**

Location	Intrusive $LA_{eq}(15\text{minute})$	Intrusive $LA_{eq}(15\text{minute})$
	Daytime <sup>1</sup> CNML	Daytime <sup>1</sup> Highly Noise Affected Level
A1 Eastern end of Jean Street <sup>2</sup>	59	75
A2 Eastern end of Ivy Street <sup>2</sup>	58	
A3 2 Wentworth Street (south) <sup>2</sup>	54	
A4 Eastern end of Gregory Street <sup>2</sup>	54	
A5 Western end of Blanche Street <sup>2</sup>	51	
A6 40 Bazentin Street <sup>2</sup>	51	

Source: Noise and Vibration Impact Assessment MOD 14 (SLR, 2018)

<sup>1</sup> Daytime standard working hours 7:00am to 6:00pm (Monday to Friday), 8:00am to 1:00pm (Saturday)

<sup>2</sup> At the most-affected point within 30m of the residential premises

The ICNG expressly 'focuses on achieving desired environmental outcomes — there are no prescribed noise controls for construction works.' As a noise assessment is conducted on a worst-case basis, the ICNG recommends that — where a project is likely to exceed the CNML or Highly Noise Affected Levels — all feasible and reasonable work practices should be implemented to minimise noise impacts'.

The Department has considered the noise impacts of the construction assessment for this modification against the construction noise management levels, and the conclusions of the project as originally approved. The peak construction noise levels of the original approved project and the proposed modification are summarised in **Table 9** below.

**Table 9: Peak construction noise levels**

Location	Intrusive $LA_{eq}(15\text{min})$ Daytime1 CNML	Intrusive $LA_{eq}(15\text{min})$ Daytime1 Highly Noise Affected Level	Peak construction noise levels — original Project Approval	Peak construction noise levels — MOD 14
A1 Eastern end of Jean Street	59 dB(A)	75 dB(A)	65-76 dB(A) (earthworks and drainage)	66 dB(A) (earthworks)
A2 Eastern end of Ivy Street	58 dB(A)	75 dB(A)	51-62 dB(A) (earthworks and drainage)	52 dB(A) (earthworks)
A3 2 Wentworth Street (south)	54 dB(A)	75 dB(A)	57-68 dB(A) (earthworks and drainage)	60 dB(A) (earthworks)



Location	Intrusive $L_{Aeq(15min)}$ Daytime1 CNML	Intrusive $L_{Aeq(15min)}$ Daytime1 Highly Noise Affected Level	Peak construction noise levels — original Project Approval	Peak construction noise levels — MOD 14
A4 Eastern end of Gregory Street	54 dB(A)	75 dB(A)	52-62 dB(A) (earthworks and drainage)	59 dB(A) (earthworks)
A5 Western end of Blanche Street	51 dB(A)	75 dB(A)	70-81 dB(A) (earthworks and drainage)	81 dB(A) (earthworks)
A6 40 Bazentin Street	51 dB(A)	75 dB(A)	64-75 dB(A) (earthworks and drainage)	53 dB(A) (earthworks)

Source: Noise and Vibration Impact Assessment MOD 14 (SLR, 2018)

The Department considers that the construction impacts of this modification are generally consistent with that assessed as part of the original project approval, as modified. As such, the Department considers that the focus of construction noise must continue to be on reducing impacts to the extent feasible and reasonable.

The Department has reviewed the project approval, as modified, and the existing requirements for the Proponent to manage noise. A Construction Noise Management Plan is required under existing condition 6.2, and outlines the measures required for construction noise mitigation, monitoring and management to be implemented during the construction of the project. It is proposed that this condition continue to apply to the project, should this modification be approved.

Construction noise impacts can be adequately managed for nearby residential properties, under the existing noise conditions. The existing conditions allow site preparation and construction activities associated with the project to occur during standard working hours (i.e. Monday to Friday 7am to 6pm, Saturday 8am to 1pm and at no time on Sundays and public holidays). The Department considers that noise impacts from the construction works are within the existing approval limits overall and can be managed effectively in accordance with the noise management framework established under the existing project approval (as modified).

### **Operational Noise**

The Proponent seeks to increase the existing operational hours of 7am to 7pm seven days per week for Lots 3 and 4 (precinct E) and Lot 2 (precinct C) to 24 hour-operation seven days per week. It is noted that the intermodal terminal, warehousing and container yards for the intermodal terminal currently have approval for 24-hour operation seven days/week.

Noise associated with the industrial warehousing area would include:

- on-site operational noise from potential machinery and plant
- noise from internal traffic
- noise from traffic and train movements.

The modification report notes that the modelling implemented for noise included mobile plant operations, idling, shunting and moving trains and assumes container throughput of 300,000 TEU. The modification assessment modified the assumptions from the previous assessments, having truck movements and truck idling redistributed throughout the day-evening-night periods, and modelling truck container handling activities to where and when they would occur on the site. Traffic movements have been spread across all time periods, as such the operational noise would be spread throughout the day. The predicted “worse case” scenario for heavy vehicles and associated intrusive noise is provided in **Table 10** below.

**Table 10: Predicted 'worse case' hourly heavy vehicle movements**

Period <sup>1</sup>	Hour Commencing	Total Heavy Vehicles			
		Intermodal & Warehouse A	Precinct B	Other Warehouses	Total
Daytime	2.00pm	102	2	20	124
Evening	6:00pm	34	0	13	47
Night-time	6:00am	56	0	6	62

Source: Noise and Vibration Impact Assessment MOD 14 (SLR, 2018)

<sup>1</sup>Daytime is 7am to 6pm, evening is 6pm to 10pm, and night-time is 10pm to 7am.

Under the project approval, operation of the project must be managed to comply with the maximum allowable noise contributions specified in condition 2.17 of the project approval. Condition 2.17 sets limits on the project's noise impacts at 11 sensitive receivers, under defined meteorological conditions. The condition generally sets two limits for each site: an 'intrusive criteria', regulating short term noise levels, and an 'amenity criteria', regulating overall noise levels. The current approval allows for the maximum allowable noise contributions in **Table 11**.

**Table 11: Maximum Allowable Noise Contributions (dBA)**

Location	Day		Evening		Night		
	7:00am to 6:00pm on any day		6:00pm to 10:00pm on any day		10:00pm to 7:00am on any day		
	L <sub>Aeq</sub> (15-minute)	L <sub>Aeq</sub> (period)	L <sub>Aeq</sub> (15-minute)	L <sub>Aeq</sub> (period)	L <sub>Aeq</sub> (15-minute)	L <sub>Aeq</sub> (period)	L <sub>A1</sub> (1-minute)
A1 – Eastern end of Jean Street	54	54	54	49	48	42	58
A2 – Eastern end of Ivy Street	53	52	52	51	47	45	57
A3 – Wentworth Street (south)	49	52	47	53	42	38	52
A4 – Eastern end of Gregory Street	49	52	47	46	45	37	55
A5 – Western end of Blanche Street	46	58	46	50	43	43	53
A6 – 40 Bazentin Street	46	58	45	54	41	39	51
A11 – Begnell Park	-	50	-	50	-	50	-
A12 – Matthew Park*	-	50	-	50	-	50	-
A13 – Greenacre Bowling Club	-	55	-	55	-	55	-
A14 – Strathfield High School (internal)	-	35	-	-	-	-	-

Location	Day		Evening		Night		
	7:00am to 6:00pm on any day		6:00pm to 10:00pm on any day		10:00pm to 7:00am on any day		
	L <sub>Aeq</sub> (15-minute)	L <sub>Aeq</sub> (period)	L <sub>Aeq</sub> (15-minute)	L <sub>Aeq</sub> (period)	L <sub>Aeq</sub> (15-minute)	L <sub>Aeq</sub> (period)	L <sub>A1</sub> (1-minute)
A15 – St Anne's School (internal)	-	35	-	-	-	-	-

\* It is noted that the location Matthew Park no longer exists and has been developed for commercial/retail use, and no other recreational areas are in the vicinity.

EPA requested clarification on the meteorological conditions under which the noise was assessed, and noise and vibration were found to be impacted by temperature inversions. Under enhanced weather conditions, location A5 exceeded the approved criteria by up to 2 dBA. The existing operational noise criteria conditions allow for temperature inversions of up to 3°C per 100m and wind speeds up to 2ms<sup>-1</sup> at 10m above ground level. The Department considers that existing conditions relating to temperature inversions should continue to apply to the project.

The Proponent's noise assessment considers compliance of the operation of the project, including the proposed changes associated with this modification, and concluded:

- the project would exceed the intrusive criteria at location A5 during daytime under enhanced conditions
- the project would comply with the intrusive criteria during evening periods
- the project would exceed the intrusive criteria at location A1 during neutral weather conditions at night-time, and at locations A1, A3 and A5 during some enhanced conditions
- the project would comply with the amenity criteria during daytime and evening periods
- the proposal would exceed the amenity criteria at location A1 during some 'enhanced' conditions.

The Proponent's analysis of its noise model indicates that the sources and nature of noise impacts from the project, including the changes in this modification, were generally consistent with those it modelled for the project without the changes. In summary, intrusive noise levels were expected to increase by up to 0.8 dBA during daytime and evening and up to 0.4 dBA during night-time, and amenity noise levels expected to increase up to 0.6 dBA during the daytime and evening periods and up to 0.9 dBA night-time periods.

The Department notes that a series of noise management conditions are in place for the project and some management measures have already been implemented for mitigating impacts from the site. The noise walls discussed in the original project approval have already been installed, and mitigate noise impact to nearby residential receivers. The project approval also includes processes for measuring noise at the boundary and sensitive locations, measuring from vertical reflecting surfaces, and implementing measures to mitigate and manage noise associated with plant and equipment.

In addition, the Proponent has committed to additional management controls including:

- operating reach stackers (machinery used to move containers within the site) in 'Low Horse Power' or 'Night Mode' modes
- fitting all site-based mobile plant
- attended noise monitoring to validate the noise modelling conducted
- investigating use of noise reducing kit (including mufflers and acoustic louvers for plant) in the event of exceedences.

The Proponent also prepared a new road traffic noise assessment to assess the impacts of the project, and account for changes to the project proposed as part of this modification. The

'allowable traffic noise levels' are based on an increase of 2 dB allowance. It is considered under the *NSW Road Noise Policy* that a 2dB change in noise levels is 'just' noticeable by most people. Predicted noise levels are likely to increase as a result of the proposal up to around 0.9 dB, with the levels attributable to the proposed modification in the range of 0.1 dB to 0.3 dB, as shown in **Table 12** below.

**Table 12: Noise Management Levels and Predicted Noise Levels due to Heavy Vehicles**

Period	Location	Existing road noise levels (2017 without ILC)	Approved predicted noise levels (2016 with ILC)	Predicted noise level (2016 with ILC MOD 14 operation)	Noise increase due to ILC MOD 14 operation	Difference between approved predicted noise level and predicted noise level with ILC MOD 14 operation
Day (7am-10pm) L <sub>Aeq</sub> (15 hour) (external)	A4 – Eastern end of Gregory Street	59	-	59	0.1	N/A
	A7 – 554 Liverpool Road	73	72	72	0.1	0.1
	A8 – 1 Robinson Street	71	71	71	0.1	0.0
	A9 – 20 Rebecca Road	72	72	72	0.3	0.1
	A10 – 118 Roberts Road	70	70	70	0.2	0.0
	A13 – Greenacre Bowling Club, Roberts Road	76	76	76	0.2	0.0
Night (10pm-7am) L <sub>Aeq</sub> (9 hour) (external)	A4 – Eastern end of Gregory Street	55	-	56	0.3	NA
	A7 – 554 Liverpool Road	69	69	69	0.3	0.3
	A8 – 1 Robinson Street	69	69	69	0.3	0.2
	A9 – 20 Rebecca Road	69	69	69	0.2	0.1
	A10 – 118 Roberts Road	67	67	67	0.3	0.1
	A13 – Greenacre Bowling Club, Roberts Road	-	-	-	-	-

Source: Noise and Vibration Impact Assessment MOD 14 (SLR, 2018)

Based on the predicted traffic noise levels, the Department agrees with the Proponent's conclusions that operations of the project, inclusive of the works proposed in this modification, would comply with the NSW Road Noise Policy and that the levels would remain comparable to the original predicted levels for the project as approved. The slight increase in traffic noise levels associated with this modification is unlikely to result in unacceptable impacts.

The Department considers that the noise impacts from operation of the project as modified are generally consistent with the levels approved, and can be adequately managed subject to compliance with the existing conditions, including the existing maximum allowable noise contributions, and with the commitments of the Proponent to implement the controls discussed above.



## 5.4. Biodiversity

Part of the site, within the CEA, is dedicated habitat area for the Green and Golden Bell Frog (GGBF) key population of Greenacre. While the modification works are not occurring on this portion of the site, there is the potential for impacts on the habitat area, through potential for increased runoff and light spill during construction, and the effects of noise and light from truck movements and warehouse activities during operation.

The original terms of approval include a requirement for implementation of mitigation measures in the report *ILC at Enfield Impact Assessment on Green and Golden Bell Frogs: Addition of Fill Material to Mt Enfield* (Biosphere Consultants Pty Ltd 2011). The actions are to be incorporated in the CEMP and OEMP. Updated letter advice was provided with the MOD 13 application from Biosphere Consultant's Pty Ltd, titled *Green and Golden Bell Frog Conservation Measures, Tarpaulin Shed Site Enfield* (27 November 2016). The advice indicated that the proposed redevelopment of the MOD 13 site should not impact on the Green and Golden Bell Frog population, subject to mitigation measures such as frog-exclusion fencing, a frog clearance survey, collection, microchipping and relocation of frogs back to ILC ponds, and daily inspections of the exclusion fence and necessary repairs conducted prior to nightfall. The Department approved Enfield ILC MOD 13 in June 2018, noting the proposed use did not impact on the land set aside for frog conservation measures, as confirmed by OEH.

These actions should continue to apply to the site as proposed be modified, as well as the mitigation measures included in the latest report, *Modification to warehouse development ILC site Enfield. Potential impacts on Green and Golden Bell Frog habitat areas* (Biosphere environmental consultants Pty Ltd 2018). As recommended by that report, and the advice of the Office of Environment and Heritage, these mitigation measures include silt fences, dust suppression, run-off barricades, redirecting lights from habitat and establishment of 'no go' areas. These controls are required most pressing to avoid any impacts associated with development on Precinct A, the closest precinct to the CEA.

The Department is satisfied that the proposed use is unlikely to impact on the land set aside for the Green and Golden Bell Frog conservation measures, and that the movement of fill has been conditioned under MOD 13 to mitigate potential impacts to the Green and Golden Bell Frog population. These conditions would continue to apply under the project, as proposed to be modified, subject to inclusion of the more detailed requirements defined in the latest reports and OEH reports.

## 5.5. Soil and groundwater

### Soil Contamination

It is known that existing contamination is present on the wider Enfield ILC site and has been subject to contamination investigations and site audit. Several other areas across the Enfield ILC have been remediated to a standard suitable for commercial/industrial use.

The site suitability letter provided by Coffey Services in relation to contamination at the site indicates that Lots 1-4, 19 and 20 can be made suitable for the proposed commercial/industrial use, provided that:

- development is undertaken in accordance with the existing RAP, and where required, updated to comply with current guidelines
- at the completion of the works the Long Term Environmental Management Plan (LTEMP) is updated to reflect any changes on the site, including noting where contaminated soil has been placed and suitably capped; and
- validation sampling is completed (where required).

The existing project approval requires a site audit statement to be issued by a NSW EPA accredited auditor (under the *Contaminated Land Management Act 1997*) prior to commencing construction works that may disturb contamination.

It is noted that no new land uses are proposed and that the site would continue to be used for commercial/industrial purposes. Therefore, those lots which have already received a SAS are still suitable for the intended end use. Also, the development proposed for Lots 1 – 4, 19 and 20 are similar to the construction and development which has occurred elsewhere on the site and it is considered these lots may be made suitable for commercial/industrial use.

Existing contamination within the site is proposed to be managed as follows:

- the stockpile of fill currently located on Lot 3 is proposed to be retained on the site and encapsulated
- fill proposed to be removed from Mount Enfield as part of the development works associated with MOD 13 (garden centre) would be moved and used as fill across the site. It would then be encapsulated
- placement of asbestos-impacted fill shall be into a purpose built encapsulated containment cell subject to a LTEMP which outlines where impacted soil had been placed and encapsulated. The LTEMP shall be kept on site
- buildings and pavements would be developed over retained contamination, with Site Audit Statements and SMPs to be updated as part of the proposed works
- a section A SAS would be submitted for each warehouse development upon completion of the validation works.

It is noted that any waste generated from the demolition and excavation activities is required to be managed in accordance with SLR Consulting's *Waste and Recycling Management Plan Enfield IKC (inclusive of Mod 14)* dated 12 February 201.

The Department considers that site contamination can be managed subject to being assessed in accordance with the *National Environment Protection (Assessment of Site Contamination) Measure (NEPM) 1999* (as amended in 2013), and remediation being conducted in accordance with State Environmental Planning Policy No 55—Remediation of Land.

#### ***Re-use of on-site fill material***

The RAP (Coffey Environments, June 2009) indicated a fill re-use protocol for the remediation of soil at the site to remain in containment cells. Prior to importing the material elsewhere on the site, the RAP identified that a visual survey should be conducted, and collection and laboratory analysis of fill samples should be conducted to determine the material being transported. Once the material for reuse is assessed a letter report prepared by the project's environmental consultant is to be prepared with recommendations as to whether the material is suitable (from a contamination standpoint) for re-use on the site. If the material is deemed suitable the source, volume, status and destination of the fill is to be tracked by the remediation contractor.

Material from the MOD 13 works that is to be transferred across the site shall be subject to testing to ensure that the material is suitable for beneficial re-use. Geotechnical consideration to the suitability of the material should also be made, which is not part of the RAP but should be considered under the CEMP.

The Department considers that this process is critical to ensuring site works are conducted safely, and has recommended a condition requiring that a Fill Importation Protocol be implemented for the proposed levelling at the site.

#### ***Management of existing contamination***

The Department is aware that some existing contamination is to be retained at the site and encapsulated beneath the building footprints. It is considered that the retaining of material reduces the need for greater importation of fill for levelling purposes, reduces the need for material to be disposed of in land fill, and reduces the risks associated with movement between sites.

The contamination reports provided to the Department as part of the modification indicate that the movement of contaminants across the site in perched groundwater is likely to be low since the site does not have a significant hydraulic gradient. The perched groundwater is thought to

have little flow or migration and, if it was to move, would move between the fill layer and natural clay boundary.

It is proposed that existing material on the site would be subject to a RAP and CEMP during the remediation process and management plans on the site for maintenance of the capping and in the event the capping layer is compromised (e.g. for drainage or electrical works). A Long Term Environmental Management Plan (LTEMP) should be available at site to manage the capping layer and to ensure it is not compromised. A SAS and report would be issued at the completion of remediation works indicating that the site has been made suitable for the proposed commercial/industrial use.

The Department has recommended conditions requiring that the site is remediated and managed to an appropriate standard. Remediation is to be governed in accordance with existing conditions requiring all remediation work should be conducted in accordance with the *Contaminated Land Management Act 1997*, and the *Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites (EPA, 1997, updated 2011)*. The conditions also require that the site is issued a final SAS indicating that the site has been sufficiently remediated to a standard consistent with the intended land use.

The Department considers that the recommended conditions, and the Proponent's commitments in documentation supporting the modification, adequately address the contamination issues at the site, subject to the completion of those further remediation works and issue of a final SAS.

### ***Movement of soil from Mount Enfield (Modification 13)***

Works approved in relation to Modification 13 facilitate an amount of fill from the existing Mount Enfield being excavated and relocated. The Department understands that this fill is to be excavated, moved and retained beneath the proposed building footprints. It is known from previous modifications that Mount Enfield is essentially a stockpile of 'fill' material containing various contaminants, including, but not limited to asbestos. The Department considers that it may be suitable to move this material during excavation works of MOD 13 and reuse it across the site subject to encapsulation.

The Department has recommended conditions for the movement of the fill from Mount Enfield across the site, a condition that requires that the soil is remediated and managed in accordance with a RAP. A LTEMP shall be in place for the portion of the site affected by this modification on the completion of remediation. A condition requires remediation work to be signed off by an EPA accredited site auditor and an SAS submitted saying the site is suitable for the proposed commercial/industrial use. It is noted that separate conditions exist for reinstating the capping layer and benching requirements for MOD 13 that are reported separately.

Where any spoil is considered unsuitable to be reused/repurposed on the site, it should be assessed in accordance with the NSW EPA's *Waste Classification Guidelines (2014)* and removed to a suitably licenced landfill licenced to accept that waste.

### ***Control of sediment***

If stockpiles are placed on the site, these would need to be managed in accordance with the existing conditions and as per the RAP. The Department is satisfied that, between the RAP and existing conditions 2.29 and 2.30, any potential sediment at the site can be adequately controlled. The Department has recommended conditions reiterating that the Proponent's construction activities are to be conducted in accordance with Landcom's *Managing Urban Stormwater: Soils and Construction* (the 'Blue Book').

## **5.6. Built form and visual impacts**

The Proponent proposes to construct 13 warehouses on the site, with building heights of up to 13.7m (excluding minor ancillary structures). The proposed warehousing layout is an approximate 15,340 m<sup>2</sup> increase in overall warehousing and light industrial land uses to 125,630 m<sup>2</sup>. The proposal would increase warehouse heights by 1.7m above those originally

approved. The Proponent advises that the change in warehouse heights reflects a market preference for warehouse form across Sydney. The proposed form is shown generally in **Figure 4**.

The new warehouses would be built within a receiving environment that is largely industrial in character. The site is important employment land, monitored in the Department's Employment Lands Development Monitor. The majority of the Enfield ILC site is zoned IN1 General Industrial, and is surrounded by warehousing and logistics, light industrial, and building supplies/bulky goods retail development in the areas on Cosgrove Road and west of the rail line towards Roberts Road. The height controls on the site and immediate surrounds in the Strathfield LEP are 12m.

The Proponent conducted a visual impact assessment based on the revised warehousing layout and form, to inform whether the additional heights could be acceptable. The assessment considered impacts of the proposed built form from 12 representative viewpoints, including from recreation areas in the vicinity of the project and residential areas near the site, in Blanche Street, Belfield (east of the site), Bellfrog Street, Greenacre (south-west of the site), and Jean Street and Rawson Road, Greenacre. An additional viewpoint on Mt Enfield would be impacted to a greater (i.e. moderate/high) degree, but the purpose of that site is to provide a lookout point over the project, and changes to the view would not be characterised as a negative amenity impact. The results of the assessment are shown in **Figure 5**.

The Proponent concludes that the off-site visual impacts would largely be negligible to moderate/low at eight locations, with moderate impacts at the remaining locations on the roads approaching the Enfield ILC entry points. In some respects, off-site impacts are shielded or partially blocked by infrastructure provided for the project, such as noise walls, earthen mounds including Mt Enfield, or other uses on the site, such as stacked shipping containers on the intermodal. Other off-site views are shielded by other industrial development in the local area. The Proponent considers overall that impacts would be negligible.

The Department considers that the extent of off-site visual impacts of the proposed warehouse layout and form — particularly the increases in permissible warehouse height — would be minimal, and that the proposal changes are reasonable. The Department notes the proposed warehousing height is consistent with standard warehouse heights across recent State significant warehousing consents granted in Sydney, including recent consents across the Western Sydney Employment Area. Views from sensitive residential and recreational locations would generally be screened, or otherwise distant with negligible view loss.

The project approval sets up a two-stage process for approval of warehouses:

- the first stage requires the broad warehouse designs and layouts (footprint and height) to be approved and then specified in the overarching project approval.
- the second stage is a detailed post-approval review and approval of the final designs, including details of the external façades, for the warehouse by the Department.

The Department considers that the Proponent has undertaken sufficient assessment to confirm that the broad warehouse form is acceptable, and can be approved and incorporated into the project approval, satisfying the requirements of the first stage.

The second stage review set out in the project approval requires the Proponent to demonstrate the design is generally consistent with:

- the height and building footprint limits specified in the overarching project approval
- the warehouse designs and layouts presented in the project approval as modified
- any approved risk assessment for packaging, repackaging or decanting of dangerous goods



- the general principles presented in the Strathfield Consolidated Development Control Plan 2005 (in particular, that component of the Plan formerly being Development Control Plan No. 27 – Industrial Development).

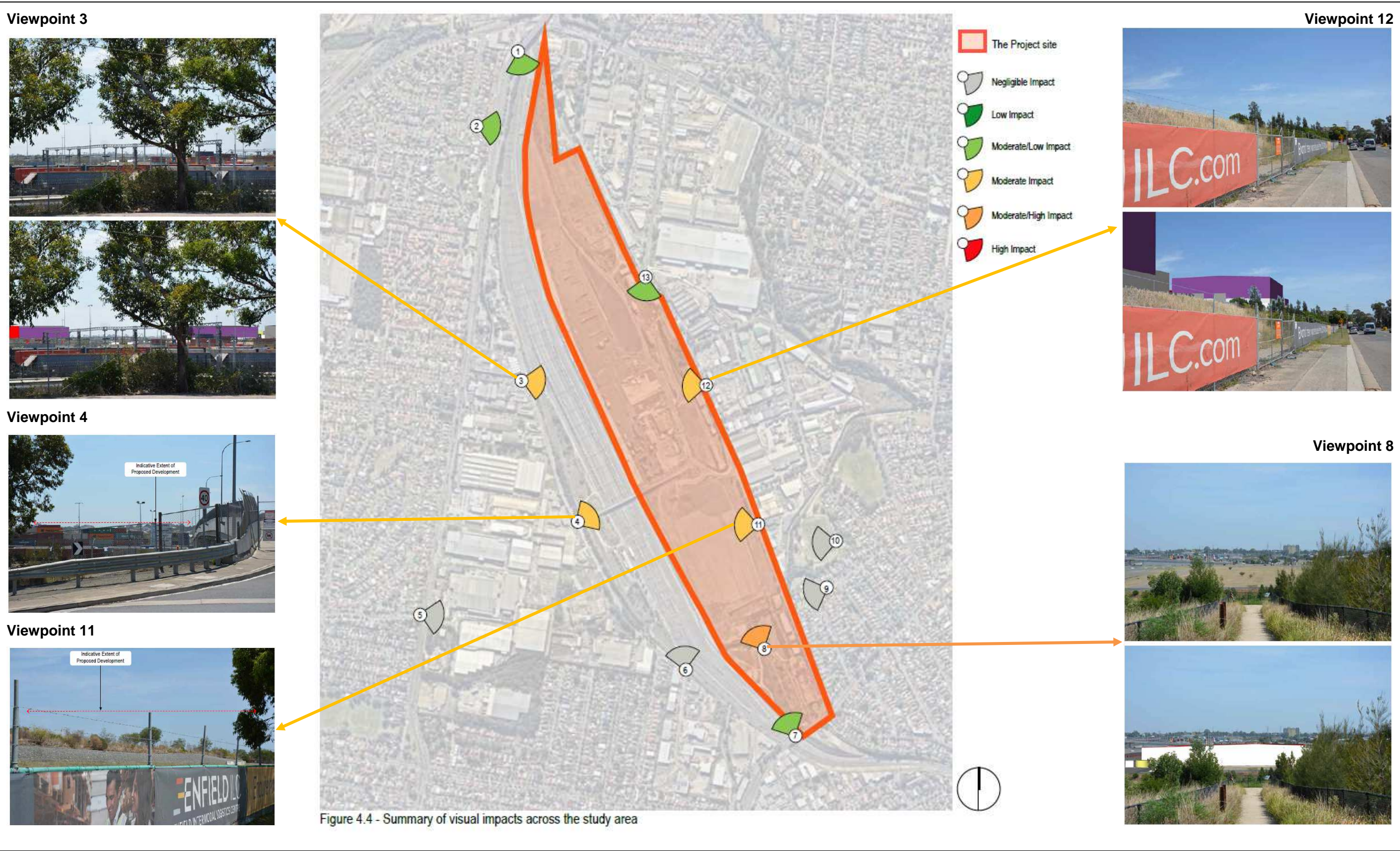
The Department considers it remains appropriate that the Proponent be able to further refine its design and submit for review and approval after determination of this modification, so long as it remains generally consistent with the parameters of the conditions.



**Figure 4: Indicative photomontages**

Source: Enfield Intermodal Logistics Centre — Landscape character and visual impact assessment (CLOUSTON Associates 2018)





**Figure 5: Viewpoint analysis**  
Base source: Enfield Intermodal Logistics Centre — Landscape character and visual impact assessment (CLOUSTON Associates 2018)



## 5.7. Other issues

The Department has also assessed other issues as provided in Table 11 below.

**Table 13: Other issues**

Consideration	Recommendation
<b>Landscaping</b>	
<ul style="list-style-type: none"> <li>Vegetation in the developable parts of the site largely limited to roadside planting along Mainline Rd and Cosgrove Rd, with shrubs and groundcover close to Cosgrove Rd east of the site. Open grassland is located to the west of the Marshalling Yard on the northern part of the site, with a mix of vegetation through the CEA.</li> <li>The Proponent has recommended planting around the proposed warehouses, with additional native trees and shrubs to screen built form.</li> <li>The Department considers that plantings can be used to mitigate the visual impact of the warehouses, and reduce urban heat island effect on this large industrial site.</li> </ul>	<ul style="list-style-type: none"> <li>The Department considers that the existing requirements for landscaping and approval of the final building designs are sufficient to ensure appropriate landscaping is delivered.</li> </ul>
<b>Air quality and odour</b>	
<ul style="list-style-type: none"> <li>An air quality impact assessment was conducted for construction and operation of the proposal.</li> <li>Excavation activities, rehabilitation works, materials handling and truck movements during construction could result in dust generation. The Proponent has recommended a series of management measures, including water spraying, considering stopping work during high wind events, and proactive maintenance of erosion and sediment control measures.</li> <li>Impacts of site operations were modelled, with the project (as proposed to be modified) providing generally minor contributions to what are, in some cases, high background PM<sub>10</sub> and PM<sub>2.5</sub>. The Department does not consider that operation of the project would result in unacceptable air pollution, but notes the Proponent's commitment to take care to minimise truck queuing and idling on site.</li> </ul>	<ul style="list-style-type: none"> <li>The Department considers that air quality impacts can be effectively managed through the CEMP and OEMP required under the project approval, and in accordance with existing requirements to undertake construction dust monitoring.</li> </ul>
<b>Water quality</b>	
<ul style="list-style-type: none"> <li>The Proponent proposes no changes to existing bioretention/ detention basins to service the proposed building layout, and provided advice from its consultant civil engineer that concludes that the proposed building layout under this modification would meet the intended water quality and hydrology regime of the existing bio-retention/ detention basins.</li> <li>Further, stockpiles are not proposed to be left at the site long term, and therefore runoff from stockpiling is unlikely to affect water quality.</li> <li>The Department also considers that the modification would not substantially change the flood affectation of the project site.</li> <li>The Department accepts that the bioretention and detention basins would remain acceptable to control overland flows on the site.</li> </ul>	<ul style="list-style-type: none"> <li>The Department considers that the existing conditions are sufficient to control water quality on site, noting requirements to employ controls to minimise soil erosion and discharge of sediments in accordance with Landcom's 'Blue Book', and direct wash down waters and amenities waste water to sewer or suitable liquid waste disposal facility.</li> </ul>

Consideration	Recommendation
<b>Civil works</b>	
<ul style="list-style-type: none"> <li>The Proponent proposes cut/fill in precincts A-F and H, with 52,425m<sup>3</sup> of fill to be imported. As a result, the site would be raised approximately 200mm.</li> <li>As discussed in <b>section 5.5</b>, the Department accepts levelling the warehouse pad with fill would reduce the likelihood that contaminated materials are disturbed, and that imported material is the preferred option over the export of potentially contaminated material off site.</li> <li>The Department considered closely the Proponent's proposed methodology, and notes that material would be placed and compacted upon arrival, no permanent stockpiles are proposed on the site, and proposed earthworks and pad levels would not impact on established bio-retention basins.</li> <li>The Department also considered the Proponent's commitment that a fill importation protocol (FIP) would be prepared and implemented, the FIP would include requirements such as the source and type of fill allowed, and the FIP is to be included with the CEMP, and should include a construction methodology statement for how the site would be raised.</li> </ul>	<ul style="list-style-type: none"> <li>The Department has recommended conditions that require that the Proponent implement a fill importation protocol (FIP) and require all bulk earthworks should be undertaken in accordance with this protocol and the CEMP as updated.</li> </ul>

## 6. CONCLUSION

The Department has assessed the modification request and supporting documentation. The Department considers that the proposed modification is appropriate as it would provide an immediate pathway to the more orderly and economic use and development of the Enfield ILC site, which has been underdeveloped since the original project approval was granted over 10 years ago.

The Department acknowledges that, on a strategic level, the modification entails a change to the proposed uses of the ILC, but it is also acknowledged that the Proponent has committed to a 'long-term objective is to ensure rail freight volumes grow such that rail becomes the predominant transport mode across the Enfield ILC'. To ensure this objective is realised, the Department has recommended conditions requiring the Proponent to prepare a periodic Intermodal Freight Transportation Report that details how the Proponent is working to increase the modal share of rail, including forecasts for how constraints and opportunities have been balanced in a way that assists the Proponent to increase the mode share of container volumes transported by rail.

In many respects, the existing project approval sets a comprehensive management framework that can continue to apply to the project as modified. The Department considers that the potential impacts associated with the development as proposed to be modified, including the development of warehousing and commercial buildings, landscaping, and the earthworks proposed, can be appropriately managed through:

- implementation of existing project approval requirements, including preparation of CEMP and OEMP, and submission of final design plans for review and approval
- updates to traffic management conditions, including requirements for Driver's Codes of Conduct during construction and operation to manage the effects of project traffic on the road network

- compliance with requirements for managing potential impacts on the existing Green and Golden Bell Frog habitat protected on site
- preparation and implementation of a fill importation protocol
- completion of remediation action plans, and submission of a site audit statement prior to operation indicating that the site has been remediated and is suitable for the proposed use.

Following on from its assessment of the modification, the Department considers that the modification is approvable, subject to the proposed conditions of approval (see Appendix B). This assessment report is hereby presented to the Acting Director, Social and Other Infrastructure Assessments.

## 7. RECOMMENDATION

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It is recommended that the Acting Director, Social and Other Infrastructure Assessments, as delegate of the Minister for Planning:

- **consider** the findings and recommendations of this report
- **determine** that the modification request is within the scope of section 75W
- **approves** the modification request under section 75W, subject to conditions
- **signs** the attached notice of modification (**Appendix B**).

Recommended by:

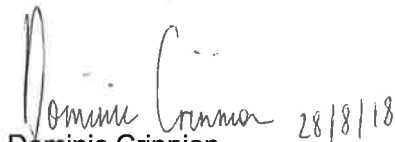


Kate Graham  
**Planner**  
**Ports and Water Assessments**

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## DECISION

Approved by:



Dominic Crinnion  
**Acting Director**  
**Social and Other Infrastructure Assessments**

as delegate of the Minister for Planning

## **APPENDIX A      RELEVANT SUPPORTING INFORMATION**

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The following supporting documents and supporting information to this assessment report can be found on the Department of Planning and Environment's website as follows.

1. Modification Request

[http://www.majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=8731](http://www.majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8731)

2. Secretary's Environmental Assessment Requirements

[http://www.majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=8731](http://www.majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8731)

3. Modification Report

[http://www.majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=8731](http://www.majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8731)

4. Public Authority Submissions

[http://www.majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=8731](http://www.majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8731)

5. Proponent's Response to Submissions

[http://www.majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=8731](http://www.majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8731)



## **APPENDIX B    MODIFYING INSTRUMENT**

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