

# Oakdale CENTRAL Volume 1: Environmental Assessment

# + Oakdale CENTRAL Concept Plan (CP#1) + Estate Works + DHL Project Application (PA#1)



**Proposed Distribution Park** of; warehouses, distribution centres and freight logistics facilities Located in the **Lands South of Sydney Water Pipeline (DOP Site 8)** - Western Sydney Employment Hub, Horsley Park

Prepared by:



**Goodman International Limited** Level 10, 60 Castlereagh Street Sydney NSW 2000

In association with:



phillip jones environmental planning, abn. 48 656 421 622 tel. 02 9918 4366, fax. 9918 4377 *striving for balance between economic, social and environmental ideals...* 

## **CERTIFICATION BY AUTHOR**

Part 3A Environmental Assessment Prepared under the Environmental Planning and Assessment Act 1979

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08\_0065 (CP#1) and 08\_0066 (PA#1) Oakdale CENTRAL Concept Plan (CP#1) and Estate Works + DHL Project Application (PA#1) Goodman International Limited Level 10, 60 Castlereagh Street Level 10, 60 Castlereagh Street Devel 10, 60 Castlereagh Street SyDNEY NSW 2000

I certify that I have prepared the contents of this accument, and to the best of my knowledge the assessment:

- has been prepared in accordance with the requirements of Part 3A and the Regulations; and
- does not contain false or misleading information.

information.

Environmental Assessment prepared by Name Position

Qualifications Address

Project

Project to which Part 3A applies Application number

Proponent name

Land to be developed

#### Certificate

Signature

Date Colin Rockliff amen

#### Glossary :

**CENTRAL Concept Plan** refers to the "Oakdale CENTRAL Concept Plan" application for the 61 hectare first precinct of the Oakdale ESTATE designated as CP#1

*DHL Asia Pacific Hubs* is defined by DHL to refer to a facility where express shipments arrive from several locations, are re-sorted, and re-distributed to the network. Other DHL Asia Pacific Hubs are in; Bangkok, Hong Kong, Seoul, Singapore & Tokyo.

DHL Project refers to the "Estate Works & DHL Project Application" over Oakdale CENTRAL, designated as PA#1

**DOP Site 8** refers to the 656 hectares of Lands South of Sydney Water Pipeline nominated in the Metropolitan Strategy "Key Sites in Western Sydney Employment Hub"

*Draft SEPP* refers to the "Draft State Environmental Planning Policy (Western Sydney Employment Hub) 2008" on Exhibition 19 March to 28 April 08

**ESTATE Concept Plan** refers to "Oakdale ESTATE Concept Plan" being the concept plan application under preparation for the whole of Oakdale ESTATE designated as CP#2

*Link Road* refers to the proposed "Western Sydney Employment Hub – Erskine Park Link Road Network" subject of the RTA's Major Project Application (MP 06\_0166) on Exhibition 20 March to 28 April 08

*Oakdale CENTRAL* refers to the centrally located 61 hectare site within *Oakdale ESTATE*, designated as one of 4 precincts, the others being; EAST, SOUTH and WEST

*Oakdale ESTATE* refers to the 421 hectare land area within *DOP Site 8*, owned by Brickworks Limited and proposed to be jointly developed with Goodman

**Project Description Report** refers to the "Oakdale" Project Description Report submitted to the DOP with the Major Projects application.

WSEH refers to the Western Sydney Employment Hub nominated in the Metropolitan Strategy

# **EXECUTIVE SUMMARY**

## Introduction

Goodman International Limited (Goodman) is planning the development of a substantial portion of the Western Sydney Employment Hub (*WSEH*), identified in the NSW Government's Metropolitan Strategy as a key centre of employment growth over the next 25 years.

The 421 hectare development site, described as *Oakdale ESTATE*, is within *DOP Site 8* "Lands South of Sydney Water Pipeline" identified in the Metropolitan Strategy, and is located in Horsley Park and Kemps Creek.

Goodman is separately preparing a concept plan for the development of the Oakdale ESTATE, in accordance with Division 3 of Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act). That concept plan, referred to as the *ESTATE Concept Plan*, will provide a comprehensive design and planning framework for the development of the *Oakdale ESTATE*, as well providing a broad Structure Plan for the whole of *DOP Site 8*.

The stated vision of the Draft ESTATE Concept Plan is:

'Oakdale will become a world-leading industrial and business park for the people of Western Sydney, built on the principle of integrating excellence in design + function + environmental sustainability + open space.'

Development of the *ESTATE Concept Plan* would generate \$320 million in direct infrastructure capital investment, \$1.6 billion in total capital investment, and is expected to generate around 5,000 jobs. The *ESTATE Concept Plan* will provide for key infrastructure and services needed for the *WSEH*, including regional roads and planning approvals for an innovative rainwater harvesting scheme that has the potential to supply 1% of Sydney's drinking water requirements.

The *Draft ESTATE Concept Plan* will also provide for the establishment and/or conservation of approximately 41 hectares of native vegetation and habitat, plus approximately 34 hectares of recreation open space for the people of Western Sydney – creating a total "parkland" of 75 hectares.

For the initial planning of the *Oakdale ESTATE*, Goodman's proposal detailed below, is to submit this concept plan application for the first precinct of 61 hectares named as *Oakdale CENTRAL* within the *Oakdale ESTATE*, and a project application for a DHL Logistics Hub within the *Oakdale CENTRAL* precinct.

Accordingly, this submission details the applications for the *CENTRAL Concept Plan* and *DHL Project* only.

The structure or scope of the applications, is indicated on Figure ES.1



Figure ES.1: Scope of Applications

## The Proposal

Goodman is proposing to develop the first precinct of the proposed *Oakdale ESTATE*, namely *Oakdale CENTRAL*, which is Lot 2 DP 120673, Old Wallgrove Road, Horsley Park and has an area of 61 hectares, and is located in the Fairfield local government area.

The proposal includes:

- a concept plan application for the Oakdale CENTRAL precinct masterplan and an environmental assessment, for; a regional distribution park, regional roads and other regional infrastructure works, as the "Oakdale CENTRAL Concept Plan" (CP#1) or CENTRAL Concept Plan; and
- a project application for the staged implementation, construction and operation of; two warehouse distribution facilities for DHL on an 11 hectare portion of *Oakdale CENTRAL*, provision for and construction of regional infrastructure and estate works, as the "Estate Works + DHL Project Application" (PA#1), or *DHL Project*.

The proposed developments in *Oakdale CENTRAL* benefit from the site investigation and analysis of the whole land area of the *Oakdale ESTATE*, which enables *Oakdale CENTRAL* to proceed as the initial projects of a coherent whole estate design. Accordingly, development is able to get started on this major employment area announced by the Government in December 2005, where issues can be attended to and proven-up, in an orderly progression appropriate for such a large land area.

Other than benefiting from the site environmental assessment undertaken for the *Draft ESTATE Concept Plan, Oakdale CENTRAL* utilises the advanced design work by Goodman and Mackenzie Pronk / Site Image (urban design and landscape respectively) for the whole *Oakdale* 

*ESTATE.* The masterplan design and architectural resolution of the initial *DHL Project* is based on the confidence of a coherent design for the whole estate, and presents an implementation of the design work completed for; the public domain, building siting & design, and landscaping elements.

Development of Oakdale CENTRAL would generate \$44 million in direct infrastructure capital investment, \$194 million in total capital investment, and is expected to generate around 1,200 jobs. The CENTRAL Concept Plan provides for key infrastructure needed for the Oakdale ESTATE, DOP Site 8 and the wider area of WSEH, including a 1.0km segment and bridge of the Link Road contemplated in the RTA's Erskine Park Link Road Network Concept Plan (MP 06\_0166), which is currently on exhibition.

The *DHL Project* has a capital investment value of \$89 million, would create 50,000m<sup>2</sup> of logistics space for DHL, and would generate 300 jobs during construction and approximately 400 jobs once operational.

The proposed DHL facilities form part of a larger regional DHL Logistics Hub (subject to future applications) that would ultimately accommodate approximately 150,000 m<sup>2</sup> of floor space, and is expected to generate some 1,200 jobs.

## Planning Context

The development the subject of the *CENTRAL Concept Plan*, and the *DHL Project*, constitute 'major projects' under Part 3A of the EP&A Act, and consequently the Minister for Planning is the approval authority for the proposal.

In accordance with Section 75M of the EP&A Act, a single application has been made for approval of the *CENTRAL Concept Plan* and for approval to carry out the *DHL Project*.

Although the land the subject of the application is still zoned Non Urban-Residential 1(a) under the *Fairfield Local Environmental Plan 1994*, the land is identified as employment land under the Metropolitan Strategy, and the *Draft State Environmental Planning Policy (Western Sydney Employment Hub) 2008 (Draft WSEH SEPP)*, which is currently on exhibition. Accordingly, the Minister has authorised the preparation of the *CENTRAL Concept Plan*, and as a consequence the Minister is able to approve both the *CENTRAL Concept Plan* and the *DHL Project*.

## **Environmental Issues**

A summary of the environmental issues and other aspects of the proposal is provided in Table ES.1 below.

A comprehensive environmental assessment has been undertaken for the *CENTRAL Concept Plan* and the *DHL Project*, with reference to the studies undertaken for the *Draft ESTATE Concept Plan*. Based on this assessment, it is considered that the key environmental and socio-economic aspects associated with the proposal include:

- infrastructure provision and funding;
- soil and water management;
- noise;
- traffic and transport; and
- visual amenity and landscaping.

Based on this assessment, it is considered that the *CENTRAL Concept Plan* and the *DHL Project* are able to be undertaken in a manner that would not result in any significant environmental impacts, or adversely affect the amenity of the surrounding area.

The proposal is considered to be compatible with the future desired character of the area under the NSW Government's Metropolitan Strategy, *Draft WSEH SEPP* and the *Draft ESTATE Concept Plan*. The proposal would have significant social and economic benefits for the local area through the provision of increased employment opportunities and the significant capital investment in the Western Sydney Employment Hub.

Importantly, the proposal would initiate and unlock the development of *DOP Site 8* of the Western Sydney Employment Hub, particularly through the expansion of roads and other infrastructure to service these employment lands. *DOP Site 8* represents some 26% of the 2,450 hectare area of the Western Sydney Employment Hub, and is expected to generate around 10,000 jobs once fully developed.

The site of *Oakdale CENTRAL* is considered to be well suited to the proposal, as it has been identified for employment uses, is consistent with the *Draft ESTATE Concept Plan*, and includes a strategy to deliver all required services and utilities in a manner that does not compromise surrounding landusers.

On balance, it is considered that the proposal's benefits significantly outweigh its costs, and is therefore in the public interest.

Accordingly, it is considered that the proposal represents orderly and reasonable development of the land. It is requested that the Minister, having due regard for the information submitted in this Environmental Assessment, grant approval to the *CENTRAL Concept Plan* and *DHL Project*.

## Structure of this Submission

This document comprises:

- Volume 1: Environmental Assessment includes; site analysis of Oakdale CENTRAL, guiding information from the Draft ESTATE Concept Plan, detail on the two combined applications namely the CENTRAL Concept Plan (CP#1) and the DHL Project (PA#1), and an Environmental Assessment of the combined applications;
- Volume 2: Drawings; and
- Volume 3: Appendices (specialist reports).

In addition, the specialist studies undertaken for the *Draft ESTATE Concept Plan* accompany this document for reference purposes.

lssue	Assessment
Traffic and Transport:	<ul> <li>Traffic assessment indicates that the existing road network can support the development of <i>Oakdale CENTRAL</i> without any significant regional road upgrades. Relatively minor upgrade works to Old Wallgrove Road would be required, including: <ul> <li>local widening between Roberts Road and the north-eastern corner of the site to achieve a consistent 7 metre road width for heavy vehicle traffic;</li> <li>local widening at bends (within the existing road reserve) to accommodate B-doubles;</li> <li>provision of a passing bay on the southbound lane at the site access; and</li> <li>60 km/h signposting for southbound traffic in the vicinity of site access driveways;</li> </ul> </li> <li>Goodman has committed to undertaking these works prior to the commencement of operations for the <i>DHL Project</i>;</li> <li>Although the traffic assessment indicates that it is not required to service <i>Oakdale CENTRAL</i>, Goodman has also committed to provision of 2.4km of the <i>Link Road</i> Network subject of the RTA's Major Project Application (MP 06_0166) by: <ul> <li>1.0km segment of Old Wallgrove Road (S-W) from Roberts Road, and a bridge over the SCA Pipeline to the north-eastern corner of <i>Oakdale CENTRAL</i> upgraded to a 40m road reserve / 4 lane divided road (requires 20m road widening from Transgrid land); and</li> <li>1.4km extension land provided by a subdivided lot to provide flexibility to the DOP / RTA to select the final location of the <i>Link Road</i>;</li> </ul> </li> </ul>
Other Infra- structure and Services:	<ul> <li>retain flexibility to select the final route of the <i>Link Road</i> to Mamre Road</li> <li>A comprehensive investigation has been undertaken to identify and assess infrastructure availability and provision to <i>DOP Site 8</i>. From that investigation, the key strategies for infrastructure provision to <i>Oakdale CENTRAL</i> include:         <ul> <li>Stormwater: A comprehensive Water Sensitive Urban Design strategy has been prepared to manage stormwater across the <i>Oakdale ESTATE</i>. <i>Oakdale CENTRAL</i> would be serviced in accordance with this strategy;</li> <li><i>Potable Water</i>: Proposed recycling of sewer and harvesting of roof stormwater. These measures would reduce reticulated water demand by 70%. The balance would be provided from the existing reticulated water supply on an interim basis. In the long term, <i>Oakdale CENTRAL</i> would be connected to the ultimate <i>Oakdale ESTATE</i> potable water system, which involves the construction of a new reservoir within Oakdale (or elsewhere in <i>DOP Site 8</i> with the agreement of the applicable landowner) to service <i>DOF Site 8</i>;</li> <li><i>Sewer:</i> A fully self-contained system is proposed, with no reliance on the reticulated sewerage system. Sewer would be treated to recycled water standards, and reused on site for non-potable uses. Any excess would be irrigated in accordance with DECC guidelines;</li> </ul></li></ul>

Table ES.1: Environmental Assessment Summary

Issue	Assessment	
Other Infra- structure and Services (cont'd)	<ul> <li><i>Electricity: Oakdale CENTRAL</i> would be serviced on an interim basis by connecting to the existing Eastern Creek Zone Substation. In the long term, <i>Oakdale CENTRAL</i> would be connected to the ultimate <i>Oakdale ESTATE</i> electricity servicing scheme, which involves the construction of a new zone substation within <i>Oakdale CENTRAL</i> (or elsewhere in <i>DOP Site 8</i> with the agreement of the applicable landowner);</li> <li><i>Gas:</i> The proposal is able to be serviced readily from existing reticulated supplies in the area;</li> <li><i>Communications:</i> The proposal is able to be serviced readily from existing supplies in the area.</li> </ul>	
Soil and	Geology and Soils	
Water:	<ul> <li>Assessment indicates no major geological or hydrogeological constraints to development of Oakdale CENTRAL, although the site does have the potential for saline soils (see below). A Soil and Water Management Plan has been prepared to manage erosion and sedimentation risk during construction works associated with the DHL Project;</li> <li>Site Contamination</li> </ul>	
	• Comprehensive Phase 1 and 2 site contamination assessments have been undertaken, which indicate that the site is suitable for the proposed use without further assessment or remediation;	
	Salinity	
	• Some areas of <i>Oakdale CENTRAL</i> have the potential for high salinity, particularly areas close to Ropes Creek and its tributaries. Goodman has committed to preparing Salinity Assessment and Management Plan/s prior to the commencement of construction of applicable projects, including the <i>DHL</i> <i>Project</i> ;	
	Stormwater Management	
	<ul> <li>A Stormwater Management Strategy has been prepared for the DHL Project, in accordance with the Oakdale ESTATE Water Sensitive Urban Design Strategy. The strategy has been designed such that:         <ul> <li>post-development stormwater flows mimic pre-development flows; and</li> <li>stormwater quality would meet or exceed applicable criteria;</li> </ul> </li> <li>Goodman has committed to preparing a detailed Stormwater Management Plan prior to the commencement of construction of the DHL Project;</li> </ul>	
	Flooding	
	<ul> <li>Areas of Ropes Creek and its tributaries are subject to flooding;</li> <li>The proposal avoids employment-related development of the flood affected area.</li> </ul>	
	Soil and Water Pollution	
	• The <i>DHL Project</i> facilities (warehouse distribution) do not present a significant risk of soil or water pollution;	
	<ul> <li>Risks associated with on-site sewage treatment would be managed through:         <ul> <li>treatment of all sewage to recycled water standards and re-use of recycled water as far as practicable;</li> <li>provision of emergency storage;</li> </ul> </li> </ul>	
	<ul> <li>design of recycled water irrigation areas in accordance with applicable DECC guidelines; and</li> </ul>	
	<ul> <li>preparation and implementation of Recycled Water Irrigation Management Plan/s, in accordance with DECC guidelines.</li> </ul>	

Issue	Assessment
Noise:	<ul> <li>Oakdale CENTRAL is surrounded by employment land. Sensitive receivers in the wider surrounding area include:         <ul> <li>residential landusers to the north-west;</li> <li>rural-residential landusers to the south and east; and</li> <li>schools and a retirement village to the west;</li> </ul> </li> <li>Noise impact assessment for the <i>Draft ESTATE Concept Plan</i> indicates that the operational and traffic noise associated with <i>Oakdale CENTRAL</i> (at full development) would comply with applicable noise criteria;</li> <li>Project specific assessment undertaken for the <i>DHL Project</i> also indicates that the project would comply with applicable operational and traffic noise associated with the <i>DHL Project</i> also indicates that the project would comply with applicable operational and traffic noise criteria;</li> <li>Construction noise associated with the <i>DHL Project</i> is predicted to marginally exceed (up to 4 dBA) relevant criteria at Erskine Park residents to the northwest. Goodman has committed to preparing a Construction Noise Management Plan as part of an overall Environmental Management Strategy for the <i>Oakdale CENTRAL</i> project.</li> </ul>
Air Quality:	<ul> <li>Given the nature of the <i>DHL Project</i> (ie. warehousing and distribution), the project operations are not expected to generate significant air emissions from stationary plant;</li> <li>Dust emissions during construction works would be managed through the adoption of standard best practice dust management measures;</li> <li>The <i>Draft ESTATE Concept Plan</i> includes a commitment to preparing a comprehensive Transport Management and Accessibility Plan to encourage sustainable transport modes, which would help to reduce transport-related air emissions associated with the development of the <i>Oakdale ESTATE</i>.</li> </ul>
Greenhouse Gas and Energy Efficiency	<ul> <li>The main greenhouse gas emission sources associated with the development of <i>Oakdale CENTRAL</i> would be those related to transport, on-site sewage management, and electricity use;</li> <li>The <i>CENTRAL Concept Plan</i> and the <i>DHL Project</i> include a number of measures to mitigate greenhouse gas emissions associated with the development of <i>Oakdale CENTRAL</i>, including:         <ul> <li>provision of pedestrian, cycle and public transport (bus stops) facilities;</li> <li>consideration of energy efficiency and resource use for all developments in <i>Oakdale CENTRAL</i>; and</li> <li>inclusion of energy efficiency measures for the <i>DHL Project</i>, including translucent roof sheeting, natural venting and cross ventilation, glazing and awning shading, and energy efficient lighting.</li> </ul> </li> </ul>
Flora and Fauna:	<ul> <li>Development of the <i>CENTRAL Concept Plan</i> and the <i>DHL Project</i> would require the clearing of approximately:         <ul> <li>0.2 hectares of Swamp Oak Forest;</li> <li>0.35 hectares of degraded woodland;</li> <li>1.5 hectares of exotic sedge; and</li> <li>0.8 hectares of wetland vegetation/farm dams;</li> </ul> </li> <li>Swamp Oak Forest is an endangered ecological community listed under the <i>Threatened Species Conservation Act 1995</i>;</li> <li>The <i>CENTRAL Concept Plan</i> includes an offset strategy to compensate for the clearing required by the project, and enhance local vegetation and habitat. The offset strategy has been prepared in a manner that is consistent with the broader offset strategy proposed for the <i>Draft ESTATE Concept Plan</i>;</li> </ul>

Issue	Assessment	
Flora and Fauna (cont'd):	<ul> <li>Ecological assessment indicates that, with the proposed offsetting, development of the <i>CENTRAL Concept Plan</i> would result in a significant net improvement in ecological values in the locality;</li> <li>Goodman has committed to implementing that part of the offset strategy that pertains to the Ropes Creek tributary in the centre of <i>Oakdale CENTRAL</i>, as part of the <i>DHL Project</i>. This offset would involve the revegetation/regeneration of 1.78 hectares of Swamp Oak Forest in the riparian area to this tributary;</li> <li>The revegetation works would be undertaken in accordance with a whole-of-site Vegetation Management Plan.</li> </ul>	
Aboriginal Heritage:	<ul> <li>Archaeological assessment indicates that the <i>Oakdale ESTATE</i> is unlikely to have been subject to intensive Aboriginal visitation and use in the past that would have resulted in creation of substantial archaeological deposits.</li> <li>8 Aboriginal sites/objects have been identified on <i>Oakdale CENTRAL</i>. All are considered to be of low-moderate archaeological significance;</li> <li>However, 4 of the identified sites/objects have recently been destroyed in accordance with a Section 90 consent obtained under the <i>National Parks and Wildlife Act 1974</i>, as part of approved quarrying operations on the site;</li> <li>Development of the <i>CENTRAL Concept Plan</i> and the <i>DHL Project</i> would disturb 3 of the remaining 4 sites/objects. The other site/object is located in the Ropes Creek riparian area and is likely able to be conserved;</li> <li>Goodman has committed to preparing a comprehensive Aboriginal Heritage Management Plan for the proposal, in consultation with local Aboriginal groups and the DECC, prior to the disturbance of any Aboriginal site/object.</li> </ul>	
Historical Heritage:	<ul> <li>No items of historic heritage significance have been identified within <i>Oakdale CENTRAL</i>;</li> <li>Development of the <i>CENTRAL Concept Plan</i>, and the <i>DHL Project</i>, is not expected to have any impact on the 3 identified heritage items on the <i>Oakdale ESTATE</i>, nor on the heritage values of the Warragamba-Prospect Pipelines 1 and 2.</li> </ul>	
Visual Amenity:	<ul> <li>The development of Oakdale CENTRAL is not expected to result in any adverse visual impacts, as it:         <ul> <li>is not readily visible from sensitive landuses;</li> <li>applies development standards that are consistent with other sites in the WSEH and the Fairfield Development Control Plan 2006, and the DHL Project is reasonably conservative in terms of scale, bulk and site cover;</li> <li>has been designed to a high architectural quality, particularly on key frontages; and</li> <li>adopts a high quality landscape plan.</li> </ul> </li> </ul>	
Wastes and Hazards:	<ul> <li>The DHL Project is not expected to involve any significant wastes or hazards.</li> </ul>	

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#### CP1.03(A) Landuse Plan

Estate Works & DHL	Project (PA#1):
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- PA1.02(A) Site Plan
- PA1.03(A) DHL 1A & 2A Site Plan
- PA1.04(A) DHL 1A & 2A Elevations / Section
- PA1.05(A) DHL 1A Ground Floor Plan
- PA1.06(A) DHL 1A Roof Plan
- PA1.07(A) DHL 1A Elevations / Sections
- PA1.08(A) DHL 2A Ground Floor Plan
- PA1.09(A) DHL 2A Roof Plan
- PA1.10(A) DHL 2A Elevations / Sections
- PA1.11(A) Bulk Earthworks Plan
- PA1.12(A) Subdivision
- PA1.13(A) Link Road OWR (SW) + Bridge B1
- PA1.14(A) Electrical Supply Stage 1
- PA1.15(A) Electrical Supply Stage 2

#### B : Urban Design

- MP-01 Site Plan
- MP-02 Estate Entry View
- MP-03 Street Section A
- MP-04 Street Section A Perspective
- MP-05 Street Section B
- MP-06 Street Section B Perspective
- MP-07 Carpark Elements
- MP-08 Building Elements
- MP-09 Building 1A/2A Façade

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- 151.1(F) Landscape Precinct Plan
- 152.1(F) Landscape Precinct Plan
- 153.1(F) Landscape Precinct Plan
- 501.1(A) Landscape Details
- 601.1(B) Landscape Sections / Planting

#### D: Civil Engineering (GHD)

SK003(C)	Bulk Earthworks Plan
21-16225	Stormwater Drainage Strategy
C011 Rev2	Erosion & Sediment Control Plan

E: Survey (Hard & Forrester)

111348005	Existing Site Survey Plan
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DP120673 Existing Title Plan

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- B Soil and Water Management Plan
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- E Noise Assessment
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## **Oakdale ESTATE Specialist Studies Volume**

- A Geotechnical and Hydrogeological Assessment
- B Phase 1 Contamination Assessment
- C Limited Scope Phase 2 Contamination Assessment
- D Riparian Areas Assessment
- E Ecological Assessment
- F Noise Assessment
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- H Historical Heritage Assessment
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- J Infrastructure Concept Plan
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- M Landscape Concept Report
- N Urban Design Report

# 1 Introduction

## 1.1 Overview

Goodman International Limited (Goodman) is proposing to develop the first precinct of the *Oakdale ESTATE*, namely *Oakdale CENTRAL*.

This submission includes; site analysis of *Oakdale CENTRAL*, guiding information from the *Draft ESTATE Concept Plan*, detail on the two combined applications namely the *CENTRAL Concept Plan* (CP#1) and the *DHL Project* (PA#1), and an Environmental Assessment of the combined applications. The submission has been prepared by Goodman to assist the Minister's and the Department of Planning's consideration of the proposal under Part 3A of the *Environmental Planning and Assessment Act* 1979 (EP&A Act).



Figure 1.1: Regional Context – Metropolitan Strategy (Employment Lands)

## 1.2 Background

Goodman is planning the development of a substantial portion of the Western Sydney Employment Hub, identified in the NSW Government's Metropolitan Strategy as a key centre of employment growth over the next 25 years.

The 421 hectare development site, described as *Oakdale ESTATE*, is within *DOP Site 8* "Lands South of Sydney Water Pipeline" identified in the Metropolitan Strategy, and is located in Horsley Park and Kemps Creek.



Figure 1.2: Key Sites in Western Sydney Employment Hub

The Minister for Planning has authorised the preparation of a concept plan for *Oakdale CENTRAL*, in accordance with Section 75M of the *Environmental Planning and Assessment Act* 1979 (EP&A Act).

Goodman is separately preparing a concept plan for the development of the entire *Oakdale ESTATE*, in accordance with Division 3 of Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act). That concept plan, referred to as the *ESTATE Concept Plan*, will provide a comprehensive design and planning framework for the development of the *Oakdale ESTATE*, as well providing a broad Structure Plan for the whole of *DOP Site 8*.

A summary of the *Draft ESTATE Concept Plan* is provided in Section 3.

For the initial planning of the *Oakdale ESTATE*, Goodman's proposal detailed below, is to submit this concept plan application for the first precinct of 61 hectares named as *Oakdale CENTRAL* within the *Oakdale ESTATE* and a project application for a DHL Logistics Hub within the *Oakdale CENTRAL* precinct.

## 1.3 The Proposal

The proposal includes :

- a concept plan application for the Oakdale CENTRAL precinct masterplan and an environmental assessment, for; a regional distribution park, regional roads and other regional infrastructure works, as the "Oakdale CENTRAL Concept Plan" (CP#1) or CENTRAL Concept Plan; and
- a project application for the staged implementation, construction and operation of; two warehouse distribution facilities for DHL on an 11 hectare portion of *Oakdale CENTRAL*, provision for and construction of regional infrastructure and estate works, as the "Estate Works + DHL Project Application" (PA#1), or *DHL Project*.

The area and context of each application is indicated on Figure 1.3.



Figure 1.3: Scope of Applications

#### **CENTRAL Concept Plan**

The CENTRAL Concept Plan has been prepared to facilitate the commencement of development of the Oakdale ESTATE, and benefits from the site investigation and analysis of the whole land area of the Oakdale ESTATE. The design of Oakdale CENTRAL has been prepared to be consistent with the Draft ESTATE Concept Plan, while allowing flexibility in the final layout of the ESTATE Concept Plan should this be required (in particular, the layout of the road network).

The *CENTRAL Concept Plan* provides a comprehensive planning framework for the development of *Oakdale CENTRAL*. The main components of the concept plan include:

- subdivision of Oakdale CENTRAL (ie. Lot 2 DP 120673) to create;
  - 6 main 'employment' development lots (which may be subdivided further if required);

- 4 environmental conservation/recreation lots;
- 4 road corridors (1 *Link Road* lot + 3 estate road lots); and
- 1 services lot;
- development of the development lots for employment (industrial) purposes;
- development of the environmental conservation/recreation lots for conservation and recreation purposes; and
- ancillary infrastructure required to service *Oakdale CENTRAL* and surrounding areas, including:
  - upgrade of Old Wallgrove Road to service the project (2 lanes);
  - a commitment to further upgrade Old Wallgrove Road (to 4 lanes) to provide a 1.0km segment and bridge of the RTA's *Link Road*; and
  - a commitment to make provision by a subdivided lot of land for a 1.4km extension of the RTA's *Link Road*;
  - construction of estate access roads; and
  - o other ancillary infrastructure to service *Oakdale CENTRAL* and surrounding areas.

Development of *Oakdale CENTRAL* would generate \$44 million in direct infrastructure capital investment, \$194 million in total capital investment, and is expected to generate around 1,200 jobs upon completion. The concept plan provides for key infrastructure needed for the *Oakdale ESTATE*, *DOP Site 8* and the wider Western Sydney Employment Hub, including segments of the RTA's *Link Road*.

It is noted that the *CENTRAL Concept Plan* does not allow any physical development to be carried out. Implementation of the *CENTRAL Concept Plan* would be subject to progressive project applications or development applications, the first being the *DHL Project,* or Estate Works & DHL Project Application (PA#1), described below.

The CENTRAL Concept Plan is discussed in detail in Section 4.

#### DHL Project

The *DHL Project* involves the following main components:

- construction and operation of two warehouse distribution facilities (Building 1A and Building 2A) for DHL within an 11 hectare portion of *Oakdale CENTRAL*;
  - subdivision of Oakdale CENTRAL (ie. Lot 2 DP 120673) to create;
    - o 6 development lots;
    - 4 environmental conservation/recreation lots;
    - 4 road corridors; and
    - 1 services lot;
  - bulk earthworks across the development lots;
- ancillary infrastructure required to service the *DHL Project*, the *Oakdale ESTATE* and surrounding areas, including:
  - upgrade of Old Wallgrove Road to service the project (2 lanes);
  - a commitment to further upgrade Old Wallgrove Road (to 4 lanes) to provide a 1.0km segment and bridge of the RTA's *Link Road*;
  - a commitment to make provision by a subdivided lot of land for a 1.4km extension of the RTA's *Link Road*;
  - o construction of estate access roads; and
  - o other ancillary infrastructure to service the DHL Project and Oakdale CENTRAL.

The *DHL Project* has a capital investment value of \$89 million, would create 50,000m<sup>2</sup> of logistics space for DHL, and generate 300 jobs during construction and approximately 400 jobs once operational.

The proposed DHL facilities form part of a larger campus-style DHL Logistics Hub that could ultimately accommodate approximately 150,000m<sup>2</sup> of floor space, and cover a large portion of *Oakdale CENTRAL*. At full development, this campus is expected to generate some 1,200 jobs for the people of Western Sydney. (It is noted that the approval of this wider project would be subject to separate project application/s).

The DHL Project is discussed in detail in Section 5.

## 1.4 The Proponent and End User

Goodman International Limited (Goodman) is the proponent of the proposal. Goodman has entered into a joint venture partnership with the landowner Brickworks Limited (the parent company of The Austral Brick Company Pty Limited) and will develop Oakdale on behalf of the joint venture entity.

Goodman is an integrated property group that owns, develops and manages industrial and business space globally. With total assets of A\$35 billion and close to 600 properties under management, Goodman is one of the world's largest listed property groups.

The proposed *Oakdale CENTRAL* buildings are being developed for DHL, one of the world's largest logistics and supply chain management companies. DHL is the global logistics arm of Deutsche Post World Net, with 76 existing facilities across Australia employing 3,500 staff. Sydney is one of six *DHL Asia Pacific Hubs*. Globally, DHL operates in 220 countries and the Deutsche Post group employs 500,000 staff, generating \$120 billion in revenue in 2006.

DHL proposes to use the project facilities for warehousing and distribution of consumer goods.

## **1.5 Environmental Assessment Team**

This submission has been prepared by Goodman in conjunction with a range of specialist consultants as listed in the following table. The same consultant team is undertaking the preparation of the *ESTATE Concept Plan*.

Table 1.1. Environmental Assessment i Toject Team		
Masterplanning & Architecture	Goodman	
Environmental Planning	Phillip Jones Environmental Planning	
Urban Design / Architecture	Mackenzie Pronk Pty Limited	
Landscape Design	Site Image Pty Limited	
Geology, Soils and Hydrogeology	GHD Pty Limited / Douglas Partners Pty Limited	
Site Contamination	HLA ENSR Pty Limited	
Riparian Areas	GHD Pty Limited	
Flooding	GHD Pty Limited	
Noise	Wilkinson Murray Pty Limited	
Flora and Fauna	Cumberland Ecology Pty Limited	
Aboriginal Heritage	Godden Mackay Logan Pty Limited	
Historical Heritage	Australian Museum Business Services	
Traffic and Transport	Traffix Pty Limited	
Infrastructure Planning	GHD Pty Limited	
Bushfire Hazard	Australian Bushfire Protection Planners Pty Limited	
Survey	Hard and Forester Pty Limited	

Table 1.1: Environmental Assessment Project Team

# 2 The Site

## 2.1 Oakdale Location and Context

*Oakdale ESTATE* covers a land area of 421 hectares located in Horsley Park and Kemps Creek, Western Sydney.

The land comprises the following titles (the property subject of the *CENTRAL Concept Plan* and *DHL Project* applications is highlighted):

- Lot 1 DP 120673 (127 hectares);
- Lot 2 DP 120673 (61 hectares);
- Lot 82 DP 752041 (141 hectares);
- Lot 87 DP 752041 (3 hectares); and
- Lot 1 DP 843901 (88 hectares).

The land is located within the Penrith and Fairfield local government areas, and forms part of the Western Sydney Employment Hub (WSEH), as identified in the NSW Government's Metropolitan Strategy. The WSEH is an important regional hub for major logistics, distribution, warehousing and production industries, in large part because of its excellent access to Sydney's key arterial road network.



Figure 2.1: Oakdale – Site Plan

The land is owned by Brickworks Limited, which is the parent company of The Austral Brick Company Pty Ltd (Austral Bricks). Goodman and Austral Bricks have entered into a joint venture to develop the Oakdale land. The majority of the land is cleared for rural landuse, currently used for low intensity cattle grazing. Lot 1 DP 843901 accommodates an Austral Bricks quarry and brickmaking plant, which although included in the *Draft ESTATE Concept Plan* area for planning purposes, will continue operating in accordance with existing approvals for the foreseeable future. Lot 2 DP 120673 also has an existing approval for quarrying operations (refer Section 2.3.1 below).

The majority of the land is fairly flat, making it conducive to the development of large scale warehouse and distribution facilities which require large level pads for building construction. Ropes Creek is a major feature of the land, bisecting the property in a north-south direction.

*Oakdale ESTATE* is accessed via Old Wallgrove Road to the east and Bakers Lane to the west. Old Wallgrove Road provides direct access to the M7 Motorway, while Bakers Lane provides access to Mamre Road, which provides direct access to the M4 Motorway.

## 2.2 Site Description

The land the subject of the current application comprises Lot 2 DP 120673 ie. the site – as indicated on Figure 2.1. The site is designated as the Central precinct of the *Oakdale ESTATE*, and referred to as *Oakdale CENTRAL*.

The site has a total area of 61 hectares, and is located wholly within the Fairfield local government area. The site is owned by Brickworks Limited.

It is noted that the proposal also includes the upgrade of a 1.0 kilometre section of Old Wallgrove Road to the north-east of the site - refer Figure 4.1. This section of Old Wallgrove Road is located within the Blacktown local government area.



Figure 2.2: Oakdale CENTRAL – Aerial Photograph

## 2.3 Site Analysis

The following provides a brief analysis of the site the subject of the current application. The site analysis is based on studies undertaken for the *Draft ESTATE Concept Plan* (see accompanying Oakdale Specialist Studies Volume).

Detailed information on environmental features of the site is provided in Section 8.

### 2.3.1 Landuse

Until recently, the site has been used for low intensity agriculture (grazing) in a similar manner to most of the remainder of the *Oakdale ESTATE*. Some low-scale intermittent cropping has also been undertaken on the site.

However, the site is currently subject to quarrying operations, being undertaken by Austral Bricks.

The quarry, known as the Bedford Quarry, was approved by the Minister Assisting the Minister for Planning (Planning Administration) on 2 July 2003 (DA-260-8-2002-i). Following the Minister's approval, the quarry commenced construction works (with the construction of noise/visual bunds) but until recently had not commenced extraction given the uncertainty about the future use of the land. In October 2007, Goodman on behalf of Austral, sought to modify the consent for the quarry so as to be compatible with the planned future industrial use of the site. The Minister (by delegation) approved the modification on 6 November 2007.

The modified quarry consent provides for a two stage quarrying operation, identified as Stage 1A and Stage 1B. The sequencing is shown on Figures 2.3 and 2.4 respectively.



Figure 2.3: Modified Bedford Quarry Layout - Stage 1A

Stage 1A involves extraction in the area of the currently proposed buildings to recover high value clay material that occurs in the top (approximately) 2.5 metres of the site, in a manner that assists the preparation of the site for future industrial use. The operation will extract clay (and possibly some shale) material down to a reduced maximum depth of approximately RL 67.7 metres, in accordance with the proposed depths of the proposed industrial facilities.



Figure 2.4: Modified Bedford Quarry Layout - Stage 1B

Stage 1B involves the continuation of quarrying in the western area of the quarry site in accordance with the limitations of the quarrying consent, again in a manner that assists the preparation of the site for future industrial use.

It is expected that the quarrying activities will be completed in 2008.

### 2.3.2 Surrounding Landuse

Land use in the locality reflects the changing nature of Western Sydney, and includes a mix of rural, rural-residential, extractive industry and special uses (including a primary and secondary school, a retirement village as well as water and electricity infrastructure) and industry. Much of the land to the north of the site is currently undergoing redevelopment for industrial employment purposes.

Landuse in the immediate area surrounding the site includes:

- North: Sydney Water Supply Pipeline Corridor, with Sydney West Electrical Substation and Employment Lands (DOP Site 6 of the Western Sydney Employment Hub) beyond;
- East: Old Wallgrove Road, with Austral's quarry/brickmaking plant beyond;
- South: Burley Road corridor (road not made), with CSR/PGH quarry/brickmaking plant and vacant employment land beyond; and

• West: Oakdale lands.

Sensitive receivers in the vicinity of the site are identified in Section 2.3.6 below.

### 2.3.3 Topography

The site is generally reasonably flat, with natural ground levels across the site ranging from approximately 55 metres AHD adjacent Ropes Creek to 75 metres AHD at Old Wallgrove Road (see figure 2.5). The south-western area of the site accommodates a localised hill with an on-site elevation of up to about 78 metres AHD.

The site of the proposed DHL buildings has natural ground levels ranging from approximately 65 metres AHD to 75 metres AHD.



Figure 2.5: Existing Topography

#### 2.3.4 Geology and Soils

The underlying geology of the site comprises Bringelly Shale, which is overlain by clay (which is being partially extracted by the approved quarry operations). Alluvial deposits of sand, silt and clay are located along the riparian areas of the Ropes Creek tributary to the west of the site.

The site contains the potential for saline soils, particularly within the lower slopes and drainage areas (see Figure 2.6).



Figure 2.6: Salinity Risk

Site contamination assessment indicates that the land generally has a low risk of contamination, although some areas have been identified for additional investigation (which has been conducted for the current application) (see Figure 2.7).



Figure 2.7: Potential Soil Contamination

### 2.3.5 Water and Flooding

The site drains from east to west, with the eastern half discharging to an unnamed ephemeral tributary of Ropes Creek, and the western half draining to Ropes Creek itself (see Figure 2.8).



Figure 2.8: Water & Flooding

Ropes Creek and the unnamed tributary have been classified in the *Draft ESTATE Concept Plan* as Category 1 and Category 2 streams, respectively (as characterised in accordance with the methods in Landcom's *Managing Urban Stormwater: Soils and Construction (2004)* guidelines). An additional ephemeral Category 3 stream is located in the south-eastern area of the site, however it is noted that drainage in this channel is currently curtailed by the upstream CSR/PGH quarry/brickmaking plant, and the drainage line has been diverted as part of the approved quarrying operations on the site.

Ropes Creek and the unnamed tributary are subject to flooding. The 1 in 100 year flood extents are shown on Figure 2.8.

#### 2.3.6 Noise and Air Quality

Sensitive receivers in proximity to the development site include (see Figure 2.9):

- Erskine Park residential area, approximately 1.3 kilometres to the north-west;
- Emmaus College and Retirement Village, approximately 1.75 kilometres to the west;
- Bakers Lane, Kemps Creek rural-residential area, approximately 1.3 kilometres to the south-west;
- Greenway Place, Horsley Park rural-residential area, approximately 1.0 kilometre to the south; and
- Burley Road, Horsley Park rural-residential area, approximately 0.5 kilometres to the southeast.



Figure 2.9: Visual & Acoustic

### 2.3.7 Flora and Fauna

The site is predominately cleared, with pockets of treed vegetation occurring along Ropes Creek and its unnamed tributary, and along the northern boundary of the site (see Figure 2.10). The vegetation along Ropes Creek and the unnamed tributary is Swamp Oak Forest, a listed endangered ecological community.



Figure 2.10: Flora & Fauna

# Oakdale CENTRAL Oakdale CENTRAL Oakdale ESTATe Oakdale CENTRAL Oakdale STATe Oakdale CENTRAL Oodala CENTR

### 2.3.8 Heritage

Eight Aboriginal objects/sites have been identified on the site (see Figure 2.11).

Figure 2.11: Heritage

Four of these are within the footprint of the Bedford Quarry, and have recently been destroyed in accordance with an approved Section 90 consent under the *National Parks and Wildlife Act* 1974 as part of the approved quarry operations. A further 3 sites are within the proposed developable area of the *Oakdale CENTRAL*, and would likely be disturbed during the future development of the site. The remaining site is located close to Ropes Creek, and it is likely that this site is able to be conserved.

No non-indigenous heritage items have been identified on or in close proximity to the site.

### 2.3.9 Visual Context

The key vista to the site is from Old Wallgrove Road. Views from sensitive receivers (as identified in Section 2.3.6 above) are largely mitigated by intervening topography and distance (see Figure 2.9).

#### 2.3.10 Infrastructure and Services

#### Access and Road Network

The site has direct and extended frontage to Old Wallgrove Road, which forms the eastern boundary of the site (see Figure 2.12). Old Wallgrove Road in the vicinity of the site is a 2-lane roadway with a width varying between 6 and 7 metres.

Old Wallgrove Road provides direct access to the M7 Motorway via Wallgrove Road, approximately 2 kilometres to the north-east of the site. The section of Old Wallgrove Road between the M7 and Roberts Road (ie. to the north of the M7 Hub Business Park) is currently in the process of being upgraded to 4 lanes (with capacity for additional lanes at key intersections), in accordance with Ministerial approvals for industrial developments in the M7 Hub.



Figure 2.12: Existing Infrastructure & Services

#### Drainage

The site currently has no significant drainage infrastructure, apart from the water management system associated with Austral's quarrying operations. This water management system includes:

- diversion of 'clean' run-on water around the disturbed area of the quarry; and
- collection, treatment and controlled discharge of 'dirty' run-off water from disturbed areas of the quarrying operations.

#### Potable Water

Water is available in Burley Road to the east of the site, however the site is at the extremities of the existing supply systems.

#### Sewer

The site is not serviced with sewerage infrastructure, and the regional system would require major augmentation to service the Oakdale land. Accordingly, an innovative self-contained system is proposed to service Oakdale, including the site.

#### Electricity

Existing high voltage overhead electricity lines are available on Old Wallgrove Road to the east of the site.

#### Gas

Gas services are available in Old Wallgrove Road to the east of the site.

#### Telecommunications

Telecommunications services are available from Old Wallgrove Road to the east of the site.