



Date: 10 February 2010

Gwandalan

Lower Hunter Lands Project

Preliminary Environmental Assessment

Traffic and Transport Issues

It is proposed that the entire Coal & Allied Industries Limited (Coal & Allied) owned Gwandalan site be rezoned/listed as a 'State Significant Site' (SSS) in Schedule 3 of State Environmental Planning Policy (Major Development). A draft Schedule 3 listing will be prepared with the Concept Plan Application.

The Concept Plan for a residential subdivision of the Gwandalan site will apply to the entire 268ha Gwandalan site. The key parameters for the future development of the site are as follows:

- Dedication of 205.75ha of conservation land to the New South Wales Government (NSWG) that is identified in the Lower Hunter Regional Strategy and Lower Hunter Regional Conservation Plan, comprising approximately 77% of the Gwandalan site.
- Maximum dwelling yield of 623 dwellings over 62.24ha.
- Indicative development staging. The number of lots and extent of staging for release areas will be largely dictated by the service infrastructure requirements as well as responding to market forces.
- The provision of associated infrastructure.
- Torrens title subdivision of the Gwandalan site. The Torrens title subdivision and boundary realignment of Coal & Allied land will enable land 205.75ha in area that is owned by Coal & Allied to be excised and dedicated to NSWG for conservation land.

Approval will not be sought under the Concept Plan for a specific lot layout. An indicative lot layout will indicate how the maximum dwelling yield of 623 dwellings could be achieved on the site.

Similarly, approval will not be sought under the Concept Plan for subdivision or construction of individual houses. However, the desired future character of the proposed concept plan will be included in Urban Design Guidelines. Urban Design Guidelines will be prepared to inform the Concept Plan in respect of urban form, built form, open space and landscape, access and movement and visual impact for the site.

It is proposed to dedicate land for conservation purposes as part of the Major Project Application via a Voluntary Planning Agreement (VPA) between Coal & Allied and the NSWG in accordance with s.93F of the Environmental Planning & Assessment Act, 1979 (EP&A Act).

The proposed Concept Plan and a Plan showing the proposed development areas and conservation areas is included in the Preliminary Environmental Assessment (PEA) prepared by Urbis.

Key Transport Indicators

Hyder has reviewed available data and anticipates that the following traffic issues are likely to form the basis of future examination of traffic and transport for Gwandalan development. They are:

1. Access to the Gwandalan area is generally available via Kanangra Drive which provides a direct connection to the Pacific Highway to the south. A secondary access is available via Link Road and Chain Valley Bay Road. The Kanangra Drive/Pacific Highway intersection is signalised.
2. Journey to Work data indicates that journeys to and from work for Gwandalan residents was predominantly by private car (87%) with Lake Macquarie, Wyong and Newcastle LGAs the principal destinations. Travel by public transport amounted to a further 5% of trips, while other modes such as walking or cycling constituted the remaining 8% of trips.
3. Approximately 5% of journeys to work used public transport and, the Gwandalan development may increase demand and provide opportunities to increase bus services.
4. The crash data indicates, in the last six years the number of recorded crashes was 184 being 134 crashes on Pacific Highway and 50 crashes on Kanangra Drive. The proposed development unlikely to have significant impact on the number or severity of crashes.
5. Recent traffic survey data indicates Kanangra Drive carried about 7,100 to 7,500 vehicles per day. The data suggests Kanangra Drive has no current major capacity problems including the Kanangra Drive traffic signals at Pacific Highway.
6. The proposed Gwandalan development will generate in the order of 394 peak hour two way trips. The additional traffic generated by the Gwandalan development in conjunction with cumulative growth from other proposed development will impact the performance of Pacific Highway and Kanangra Drive signals.

Director General's Requirements

The issues identified above can be addressed as part of the Environmental Assessment. The Director General's Requirements for the traffic component of the Environmental assessment could be preparation of a traffic and transport report in accordance with the Roads and Traffic Authority of New South Wales (RTA) 'Guide to Traffic Generating Developments,' that addresses the following:

- a) An identification of all relevant vehicular traffic routes and intersection for access and egress.
- b) Current traffic counts for all of the above traffic routes and intersections.
- c) The anticipated vehicular traffic generated from proposed lots.
- d) Consideration of the traffic impact on the existing intersections and the capacity of the Pacific Highway to safely and efficiently cater for the additional vehicular traffic generated.
- e) The issue of single access in and out of Gwandalan and Summerland Point.
- f) An analysis of the cumulative traffic and transport impacts of this development on the existing township and taking into consideration other proposed developments.
- g) Traffic analysis, using SIDRA or similar traffic model for the relevant intersections including:
 - current and traffic growth projected for the life of the project
 - 95th percentile back of queue lengths
 - Delay and level of service on all legs.