

NWRL Alternative Alignments



NWRL ALTERNATIVE ALIGNMENTS - SUMMARY OF LANDUSE AND ZONING

- **5**
- 3 October 2007





NWRL Alternative Alignments

NWRL ALTERNATIVE ALIGNMENTS - SUMMARY OF LANDUSE AND ZONING

5

3 October 2007

Sinclair Knight Merz ABN 37 001 024 095 100 Christie Street PO Box 164 St Leonards NSW Australia 1590 Tel: +61 2 9928 2100 Fax: +61 2 9928 2500 Web: www.skmconsulting.com

COPYRIGHT: The concepts and information contained in this document are the property of Sinclair Knight Merz Pty Ltd. Use or copying of this document in whole or in part without the written permission of Sinclair Knight Merz constitutes an infringement of copyright.

LIMITATION: This report has been prepared on behalf of and for the exclusive use of Sinclair Knight Merz Pty Ltd's Client, and is subject to and issued in connection with the provisions of the agreement between Sinclair Knight Merz and its Client. Sinclair Knight Merz accepts no liability or responsibility whatsoever for or in respect of any use of or reliance upon this report by any third party.

The SKM logo is a trade mark of Sinclair Knight Merz Pty Ltd. © Sinclair Knight Merz Pty Ltd, 2006



Contents

1.	Introduction	1
2.	Landuse	2
3.	LEP Zoning	3
4.	Dwelling numbers	4
5.	Summary	5
Арр	endix A – Methodology	6



Document history and status

Revision	Date issued	Reviewed by	Approved by	Date approved	Revision type
1	12/09/07	B Jones/R Lemon/J White	B Jones	13/09/07	
2	13/09/07	B Jones/R Lemon	B Jones	19/09/07	
3	18/09/07	B Jones	B Jones	20/09/07	
4	21/09/07	G Cavallaro	G Cavallaro	02/10/07	
5	03/10/07	G Cavallaro	G Cavallaro	03/10/07	

Distribution of copies

Revision	Сору по	Quantity	Issued to

Printed:	3 October 2007
Last saved:	3 October 2007 05:30 PM
File name:	I:\ENVR\Projects\EN02164\Technical
Author:	SR Johnson
Project manager:	SR Johnson
Name of organisation:	Transport and Infrastructure Development Corporation
Name of project:	NWRL Alternative Alignments
Name of document:	NWRL Alternative Alignments - Summary of Landuse and Zoning
Document version:	5
Project number:	EN02164.3



1. Introduction

The North West Rail Link (NWRL) project consists of the design, construction and commissioning of approximately 22km of new double track comprising 16km of twin bored tunnels connecting with existing stub tunnels near Epping Station, a cut and cover tunnel section of 1.2km, 4km of above ground track, 1km of which will be on viaduct, and a further 1.4km cut and cover tunnel section. New undergrounds stations will be provided at Franklin Road, Castle Hill, Hills Centre, Norwest Business Park, Burns Road and Rouse Hill along with a train stabling facility at the western end of the new line, just west of Windsor Road, and a smaller stabling facility at the new Rouse Hill Station.

The objective of this piece of work was for SKM to provide TIDC with updated ownership details (for August 2007) and landuse information about affected properties for the five alternative alignments between Epping and Franklin Road (named Brown, Pink, Blue, Green and Gold). In New South Wales, there is no single source of existing landuse data and so a combination of datasets has been used to provide a fuller understanding of properties that could be affected by the alignments. RP Data (a property information provider) was to be used as the main source of landuse data with zoning information from the LEPs to corroborate the landuse intent. Data was then verified through desk-based analysis.



2. Landuse

Table 1 and Figure 1 show landuse for each alignment. Each alignment is characterised by single residence dwellings, with small numbers of educational, commercial and religious services and relatively few commercial properties. The Blue alignment would affect the most properties in total (430) and the Gold the fewest (187). The Blue alignment also covers the highest number of multiple residence dwellings (12). Further details about the total number of dwellings affected can be found in Section 4.

Landuse Category	Brown	Gold	Blue	Pink	Green
Club/Sporting Facility	2	2	2	2	2
Commercial Strata Unit				14	1
Educational	13	3	14	6	7
General Commercial	5	7	10	14	15
Multiple Res Dwellings	4	6	12	7	8
Religious	4	2	11	1	1
Retirement Village	1		5		
Single Res Dwelling	221	139	355	244	271
Vacant Urban Land	12	28	21	22	23
	262	187	430	310	328

Table 1: Landuse Per Alignment

Figure 1: Landuse (See appendix for larger map)





3. LEP Zoning

Table 2 shows zoning per alignment according to the Hornsby (1994) and Baulkham Hills (2005) LEPs. The zones have been reduced to the broad subject headings and roads have been removed.

Table 2: LEP Zoning

Zoning	Brown	Gold	Blue	Pink	Green
Residential	237	154	384	257	286
Business	1	3	4	23	12
Special Uses	14	4	22	8	8
Open Space and Recreation	10	26	20	22	22
Total Land Parcels	262	187	430	310	328

Figure 1: LEP Zoning Per Alignment (See appendix B for larger map)





Dwelling numbers 4.

Table 3 shows an estimate of the number of dwellings per alignment. This is based on information from RP Data and desktop aerial photography analysis.

The Brown, Gold and Blue alignments all result in the need to modify the approved Parramatta Rail Link (PRL) rail tunnel corridor. This would increase the number of dwellings affected in the future rail tunnel connecting Epping with the Carlingford line.

The Gold alignment essentially follows the boundary of the Hills M2 motorway for 2.5km. While the land that the motorway is on is owned by the Roads and Transport Authority, it is noted that Transurban Ltd have a concession to operate a tollway (Hills M2) over the land until 2042. Transurban's interest would need to be considered.

Total Dwellings per Density Type Brown Gold Blue Pink Green Single Residence 221 139 355 244 271 Medium Density (2-6 8 4 22 4 dwellings) 4 High Density (6+ dwellings) 0 120 127 64 64 **Total Dwellings** 229 312 339 263 504 Estimated Additional Affected Parcels to RPL 125

_

_

Table 3: Number of Dwellings per Alignment

Corridor





Figure 3: Number of Dwellings per Alignment (See appendix B)

5. Summary

An analysis of all the proposed routes concludes that there is approximately the same mix of property types affected in each alignment. Of the properties affected in each route, 74% to 84% of properties are residential. As a result any tunnel route will need to take similar actions to minimise effects on the affected properties.



Appendix A – Methodology

Ownership data from various sources and from different stages of the NWRL mapping project have been assembled into a single database (Cadastre07_002.shp) for use in a geographical information system (GIS). The geometry is selected from the latest LPI's Cadastre for 2007.

There is no single method of determining existing landuse and numbers of dwellings, therefore information was used from RP Data and aerial photography. It was necessary to use aerial photography as RP Data specialises in real estate property evaluation and does not hold information about certain types of land for example, public open space.

Zoning data was taken from the LEPs for Hornsby (1994) and Baulkham Hills (2005). The zones have been reduced to the broad subject headings to enable comparison between the two datasets and roads were removed from the figures so that the 'special uses' category only contains properties.



Appendix B