8.6 Public Transport

It is expected that new and extended bus services within Rolleston will occur as the residential area developments southward. Provisions for a 'park-and-ride' scheme in Rolleston are also included in the TRIP within the next 10 years in addition to these services. The 'park-and-ride' scheme enables residents who are beyond walking distance of bus routes to drive to a central parking area on the bus route and then utilise the bus service for access into Christchurch City. Given the site's location adjacent to the proposed urban area, such a service could be utilised by commuters from the site, assisting in the management of travel demand.

9. Planning Requirements

9.1 Canterbury Regional Policy Statement

The Canterbury Regional Policy Statement (RPS) has been prepared to meet the requirements of the Resource Management Act 1991, and aims to promote sustainable management of natural and physical resources.

Chapter 15 of the RPS outlines four transport related policies, as outlined below:

Policy 1: "Protect Canterbury's existing transport infrastructure and land transport corridors necessary for future strategic transport requirements by avoiding, remedying, or mitigating the adverse effects of the use, development or protection of land and associated natural and physical resources on transport infrastructure."

It is considered that the proposed Plan Change will have little effect on the future transport requirements for key infrastructure. With relevance to the site, it is recommended under CRETS that Dunns Crossing Road is upgraded to the standard of a Collector Road between Lowes Road and Selwyn Road. The proposal would not prevent the upgrading from occurring.

Policy 2: "Promote the use of transport modes which have low adverse environmental effects."

The proximity of the rural residential development to the urban boundary of Rolleston will enable the use of the existing and proposed walking, cycling and public transport infrastructure within Rolleston ensuring that alternative modes can be promoted from this site equally as they will be from the rest of the urban area. Specific provisions will be made for pedestrians within the site, while it is anticipated that cyclists will be accommodated on-road given the expected traffic volumes and vehicle speeds.

Policy 3: "Promote changes in movement patterns, travel habits and the location of activities, which achieve a safe, efficient and cost-effective use of the transport infrastructure and reduce the demand for transport."

Rolleston will gradually become more self-sufficient as the business and industrial areas expand and will enable new residential development to have less reliance on the transport connections to Christchurch. The location of the site promotes efficient and cost-effective use of transport infrastructure by being located adjacent to the proposed urban limits and will have direct connectivity with Dunns Crossing Road, which is expected to be a Collector Road prior to development of the site. There are multiple routes connecting the site with the township and wider areas, which will allow traffic to distribute over the most efficient routes. Therefore, there will be minimal impact on the ability to maintain a safe, efficient and cost effective use of the transport infrastructure.



Policy 4: "Ensure that in the provision, realignment or maintenance of transport infrastructure, adverse effects on natural resources that meet the criteria of sub-chapter 20.4 are avoided, remedied, or mitigated."

Sub-chapter 20.4 of the RPS outlines matters of "regional significance" from an environmental conservation (plant, wildlife, and heritage) view point, for which there are no known conflicts with the transport infrastructure proposed for the Plan Change.

9.2 Proposed Change No 1 to the RPS

Proposed Change No.1 (PC1) to the RPS introduces a new Chapter, 12A (Development of Greater Christchurch), which provides direction for the growth, development and enhancement of the urban and rural areas of the Greater Christchurch area. It identifies and maps a number of greenfield areas for residential and business growth. Variation 1 to PC1 includes urban limits as indicated previously on Figure 2 for the Rolleston area.

Policies 7 (Development Form and Design), 9 (Transport Effectiveness), 10 (Strategic Transport Infrastructure and Reverse Sensitivity) and 13 (Rural Residential Development) of the PC1 are relevant to this Plan Change proposal from a transportation perspective. The relevant elements of these policies are discussed below.

9.2.1 Policy 7: Development Form and Design

Policy 7 stipulates that activities in greenfield sites should provide for the following:

- good safe connectivity within the area, and to surrounding areas, by a variety of transport modes, including motor vehicles, cycling, pedestrian and public transport, and provision for easy and safe transfer between modes of transport,
- being located within walkable distance to community, social and commercial facilities,
- provide effective, efficient and attractive walking paths and cycleways, preferably integrated with open space and stormwater detention areas, within, across and linking beyond the areas.

It is considered that Policy 7 is intended to relate to activities within the proposed urban limits, rather than rural residential activities outside the limits. However, the site's location adjacent to the urban limits maximises opportunities for connections to the urban area for a variety of modes and minimises distance to community facilities.

9.2.2 Policy 9: Transport Effectiveness

Policy 9 requires that development of greenfield sites shall not result in overloading the existing transport network infrastructure, in particular strategic roads, and avoid detracting from the primary through-traffic function of state highways and arterial roads. It also states that territorial authorities should ensure that transport networks provide for safe, sustainable, integrated movement of goods and people both within the sub-region, and to and from locations outside the sub-region.

It is considered that the development of the subject site on a rural residential basis will not result in the overloading of the existing transport network (as discussed in earlier sections of this report), and will not detract from the primary function of SH1.



9.2.3 Policy 13: Rural Residential Development

Policy 13 states that Rural Residential development, beyond areas already zoned in District Plans as at 28 July 2007, shall occur in accordance with Policy 6 (a).

The policy is accompanied by a range of methods in which Rural Residential development should occur. Method (iii) states:

 Access is provided (legal and physical) to a sealed road, but not directly to a road defined in the relevant district plan as Strategic or Arterial Roads or which are State Highways under the Transit New Zealand Act 1989;

The site will not have frontage to a Strategic or Arterial Road in the future. Direct property access to Dunns Crossing Road can be provided in compliance with the District Plan rules for access separation distance with Dunns Crossing Road being assessed as an Collector Road, as indicated within Section 8.4. It is expected that Dunns Crossing Road will be sealed north of Selwyn Road to the existing end of seal to encourage utilisation of the upgraded Selwyn Road by proposed greenfield residential development in the area.

Method (iv) also includes:

where adjacent to or in close proximity to an existing urban or rural residential area, be able to be integrated into or consolidated with the existing settlement.

The site's location on the proposed Rolleston urban limit boundary creates opportunities from a transport perspective to promote the integration of the site with Rolleston by way of providing appropriately located access roads and pedestrian connections that are consistent with the provisions in Rolleston.

9.3 District Plan Policies and Objectives

Section B2.1 of the Township Volume of the District Plan outlines the transportation related objectives and policies of the plan, along with the environmental outcomes expected as a result of their implementation. The following table discusses each expected outcome in relation to the development proposal.



Expected Environmental Outcome	Comments					
Strategic Roads are safe and efficient transport routes for "through" traffic travelling across the District.	The through movement function of SH1 will not be compromised by the proposal.					
Other roads in the District serve all their functions safely and efficiently.	Assessment indicates that the potential Plan Change development would not overload the existing transport networks. Access to the development can be provided in accordance with the District Plan rules (See Section 8.4)					
The visibility of roads, intersections, vehicular accessways and railway crossings is not impaired.	The layout of the site will be designed to provide good visibility at property accessways and intersections.					
Roads are designed, maintained, and if necessary, upgraded to the standard required for their traffic volume, traffic type and the amenity values of the zone.	The roads within the site will be designed to a standard appropriate for their use. The proposal will not prevent future upgrading of Dunns Crossing Road.					
Adverse effects of residential and business growth in Selwyn District on road links into Christchurch City are addressed.	The CRETS study has proposed the upgrading of routes to Christchurch, which would carry traffic associated with the site. These are generally scheduled for implementation within TRIP. It is considered that effects of the development of links between Rolleston and Christchurch have been addressed as the level of development sought for the site is well within the rural residential projections set by Table 1 of Policy 6 of PC1.					
Heavy traffic bypasses townships, where practical.	The site will generate minor levels of heavy vehicle traffic.					
An increase in separate cycleways and walkways in townships. The number of walkways and cycleways increase that are effective in providing alternative linkages within townships	Table E 13.9 – Roading Standards of the District Plan is proposed to be amended to include roads within the Living 3 zone. This includes the requirement of footpaths on Living 3 roads. It is considered that cyclists can be accommodated on-road within the Plan Change site given the low volume traffic environment					
No increase in the extent to which main transport routes "bisect" townships.	The development of the subject site will not result in an increase to the extent to which SH1 bisects the residential portion of the Rolleston township from the industrial development.					
Fewer impacts from the construction, maintenance and repair of roads or other utilities in road reserves, on people and the environment.	The site is a greenfield site, hence the construction of the project will have a minimal impact on the existing road network, and the local community.					
New settlement and residential activities occur closer to places of work or existing townships.	The site is located adjacent to the existing residential zone of Rolleston.					

Table 7: District Plan Policies and Objectives

As can be seen in the above table, the development proposal is expected to achieve the desired outcomes of implementing the transportation policies and objectives of the District Plan.

9.4 District Plan Rules

The District Plan sets out a number of Rules relating to the transport-related elements of any proposal. The following Design Standards from Appendix 13 Volume 1: Townships have been assessed against the Concept Plan for the Plan Change:



E13.3.1.1	New Roads: Any new road shall be laid out and vested in the Council in accordance with the standards contained within Table E13.9	Proposed amendment to Table E13.9 to provide for the Living 3 zone (see below)		
E13.2.2	Distances of Vehicle Crossings from Intersections: Access to a Collector Road (speed limit >50km/hr)) (Dunns Crossing Road) shall be separated from its intersection with a Local Road by 60m	Can be achieved for site		
	Access to a Local Road (speed limit <50km/hr) shall be separated from its intersection with an Collector Road by 25m			
	Access to a Local Road (speed limit <50km/hr) shall be separated from its intersection with a Local Road by 10m			
E13.2.3	Spacing between Adjacent Property Accesses No separation requirement for accesses on non-State Highway Roads	Yes		
E13.3.2	Intersection Separation:			
	The minimum distance between intersections shall be as follows:	Minimum spacing of 160m proposed (see below)		
	100km/hr – 800m			
	70km/hr – 220m			
	50km/hr – 125m			

Table 8: District Plan Rules

Development of the site can be provided in general accordance with the existing District Plan Rules. However, the separation distance between several intersections as outlined on the Concept Plan are between the 125m and 220m separation requirements for roads within 50km/hr and 70km/hr speed limit areas respectively. It is considered that the speed environment within the site will similarly be between 50km/hr and 70km/hr and therefore any effects associated with the potential non-compliance will be minimal. However, it is recommended that flexibility in the location of the Southern Secondary Road's connection to Dunns Crossing Road is provided for within the Outline Development Plan as this link is likely to be preceded by a future connection on the northern side of Dunns Crossing Road.

It is proposed to insert the following additional line into the Table E13.9 – Roading Standards of the District Plan. The section of the exiting District Plan table providing for existing rural residential activities (Living 2 and 2a zones) is included for a comparison.

Table E13.9 - Roading Standards

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Type of Road	Legal Width (m)		Carriageway width (m)		Kerb and	Factneths			
	Min	Max	Min	Max	Channel	Footpaths			
Local Roads – Living 2 and 2A Zones where allotments have an average area > 5000m2	15	20	7	8	-	-			
Local Roads –Living 3 zone at Rolleston (as shown within the Outline Development Plan at Appendix 34)	18	20	6	8	-	One side only			

Table 9: Proposed Insertion to Table E13.9



A minimum carriageway width of 6m can be supported for Local Roads within the Plan Change site, and therefore is it proposed that a minimum carriageway width of 6m is included for roads within the Living 3 zone, which is consistent with the NZS4404:2004 roading specifications.

The existing rules for Local Roads within the Living 2 and 2a zones allow for a maximum carriageway width of 8m where the average lot size exceeds 5,000m². It is proposed that 7m wide carriageways are provided on the higher standard secondary roads within the site and therefore an 8m carriageway would not be necessary under this Plan Change. However, allowing a maximum width of 8m within the Living 3 zone does not preclude the recommended 7m width from being provided, is consistent with the existing rules, and would allow for such a provision in any future Plan Change site adopting the Living 3 zone where an 8m carriageway may be appropriate.

There is no requirement to provide a footpath on Local Roads within the Living 2 and 2a zones where the average lot size exceeds $5{,}000\text{m}^2$ under the existing District Plan rules. Given the proposed average lot size, being greater than $5{,}000\text{m}^2$, the existing District Plan roading standards would not require a footpath on roads within the Plan Change area. However, given that the site is located immediately adjacent to the proposed urban limit of Rolleston, it is considered that internal footpaths are necessary to promote walking between the site and the urban area. Therefore, it is proposed that Table E13.9 is amended to require a provision for footpaths on one side of all roads within the Living 3 zone. This requirement would extend to Dunns Crossing Road given that direct property access is proposed from the road, although a footpath is expected to be provided with ongoing development of the permitted residential zoning on the north-eastern side of the road.

10. Summary and Conclusion

This Transport Assessment has identified, evaluated and assessed the various transport and access elements of the proposed Plan Change relating to the SPBL Skellerup block, on the south-western boundary of Rolleston from Outer Plains to a new Living 3 zone that provides for rural residential activities. It is considered that the additional traffic expected to be generated can be accommodated the road network without significant effect on its operation.

Development of the site on a rural residential basis is not considered contrary to the relevant policies of the Canterbury Regional Transport Strategy and Proposed Change 1 to the Regional Transport Strategy. Such development is also not considered contrary with the Environmental Outcomes anticipated from the transportation related Policies and Objectives of the Selwyn District Plan and compliance with the existing transportation related rules of the District Plan can be achieved.

Based on our assessment, we recommend the following:

- That the proposed roading standards are confirmed by the proposed amendment to Table E13.9 Roading Standings of the District Plan
- That the key details of the Concept Plan road network are incorporated to the Outline Development Plan to be included within the District Plan as part of the Plan Change
- That the Outline Development Plan provides flexibility in the location of the Southern Secondary Road connection with Dunns Crossing Road to allow for integration with the proposed east-west Collector Road that is to be constructed east of Dunns Crossing Road.

It is therefore concluded that the proposed Plan Change can be supported from a transportation perspective with the adoption of the recommendations above.

Traffic Design Group Ltd 16 April 2009

