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Tab 5(b) Concept Design - Roberts Line - Railway Road Curve



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Tab 5(c) Concept Design – Roberts Line – Richardsons Line Roundabout





Tab 5(d) Concept Design – Foodstuffs sight lines



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Tab 6(a) Ecological Assessment – Updated Figure 2 – site access

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6(a)

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Plan prepared for KiwiRail by Boffa Miskell Limited

Project Manager: Vaughan.Keesing@boffamiskell.co.nz | Drawn: KMa | Checked: JGa

www.boffamiskell.co.nz

Projection: NZGD 2000 New Zealand Transverse Mercator

Tab 6(b) Ecological Assessment – Updated Figure 3 – Stream system features

#### 6(b)



Tab 7(a) Freight Hub site in catchment context

APPENDIX 1



Freight Hub site in the catchment context and showing the northern, central and southern catchments draining through the site. (Adopted from Figure 2, Stormwater and Flooding Assessment).

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Tab 8(a) Community facilities within the local impacted area



Tab 8(b) Residential dwellings within the local impacted area



Tab 8(c) Comparison of social impact across the local impact area

**Properties north of Designation Extent** (eg Maple Street, Te Ngaio Road, Railway Road)

*Effects on community* - potential effect on character from industrial development occurring close to Bunnythorpe township (less physical separation). Character/amenity of Bunnythorpe cemetery may be affected from higher background noise.

*Quality and amenity of environment* - a number of residents on Maple Street and Te Ngaio Road will experience moderate-high or high negative visual effects (requiring further assessment at detailed design). Noise levels will be higher than currently experienced and some residents may experience construction noise (houses within 50 metres of construction).

Peoples' way of life - potential construction traffic disturbance.

### Properties further north/west (eg Kairanga-

Bunnythorpe Road, Te Ngaio Road)

*Quality and amenity of the environment* - noise levels higher than currently experienced due to freight hub activity and potential construction traffic.

*Peoples' way of life* - residents' movements potentially disrupted from construction traffic.



#### Properties within Designation Extent

*Effects on community* - displacement of 24 households (wellbeing of displaced residents, community cohesion); a change from a community of rural/rural-residential homeowners to an industrial workforce (community character).

Quality and amenity of environment – change from quiet rural / rural-residential environment to a noisier, busier industrial environment.



## **Properties west of Designation Extent** (eg Roberts Line, Clevely Line)

Quality and amenity of environment - small number of residents adversely affected by noise levels which may require noise treatment; houses within 50 metres of construction may experience construction noise (compliance required with construction noise and vibration criteria). High negative visual effects for some (further assessment at detailed design).

*Peoples' way of life* - reduced connectivity from Railway Road closure and movements potentially disrupted by construction traffic.



## **Bunnythorpe centre** (including Bunnythorpe intersection)

*Effects on community* - potential effect on character from industrial development occurring close to Bunnythorpe township (less physical separation). Community resources will not be compromised.

Quality and amenity of the environment positive visual impact from mitigation planting at the entrance to the township, but noise levels will be higher than currently experienced.

Peoples' way of life - potential connectivity and safety effects for residents accessing shops and other services if construction traffic uses Bunnythorpe intersection and/or travels along the township's main road.

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**Properties east of Designation Extent** (eg Sangsters Road, Parrs Road, Tutaki Road, Clevely Line, Nathan Place)

Quality and amenity of environment - some residents adversely affected by noise levels to an extent they may require noise treatment; houses within 50 metres of construction may experience construction noise (compliance will be required with construction noise and vibration criteria). Variable visual effects, including some residents who will experience moderatehigh adverse effects (requiring further assessment at detailed design).

*Peoples' way of life* - reduced connectivity and implications on patterns of daily living from road/intersection closures and increased travel times.

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## Properties further east (eg Stoney Creek Road, Tutaki Road)

Quality and amenity of environment change to amenity (noise and activity) as roads may experience more traffic due to roading changes and potentially from construction traffic. Noise levels higher than currently experienced.

*Peoples' way of life* - increased travel times; residents' movements potentially disrupted from construction traffic.

Southern properties (eg Richardsons Line, Roberts Line, Railway Road)

*Quality and amenity of the environment* - noise levels higher than currently experienced.

*Peoples' way of life* - reduced connectivity (Roberts Line cul-de-sac); potential construction traffic disturbance for commercial and residential properties.

Map 3 – Comparison of social impact across the local impact area		
<ul> <li>Designation boundary</li> <li>Local impact area</li> </ul>	Relative level of impact within the Higher Lower	e local impact area: All boundaries are indicative and for illustrative purposes only. Version 2

Tab 9(a) Lighting Layout - sheet 1





Tab 9(b) Lighting Layout – sheet 2



Tab 9(c) Lighting Layout – sheet 3



<sup>9(</sup>c)

Tab 9(d) Lighting Layout - sheet 4





9(d)

Tab 9(e) Lighting Layout - sheet 5



9(e)

Tab 9(f) Lighting Layout - sheet 6