Amy Selvaraj (DELWP)

From:	Stefan Wolmarans
Sent:	Thursday, 14 January 2021 12:58 PM
То:	Stuart Fenech; Chris Padovan; Michael.Mattingley
Cc:	Loretta Fallaw; Power, Tim; Campbell, Kirsty; Chris Cook; Jozsef Patarica
Subject:	Fingerboards Mineral Sands - Proposed road and intersection geometry
Attachments:	2390-001.pdf; 2390-002.pdf; 2390-003.pdf; 2390-004.pdf; 2390-005.pdf; 2390-006.pdf; 2390-010.pdf; 2390-011.pdf; 2390-012.pdf; 2390-013.pdf

All,

Attached please find concept designs and a summary of current roads designs for discussion at this afternoon's meeting. The attached plans reflect Kalbar's current thinking about the road layout, and in some respects differ from the road layout exhibited in the EES. While Kalbar is not abandoning the layout exhibited in the EES, during the concept design process we have been exploring ways in which to optimise the layout. We would welcome the Department's views.

Set out below is a brief summary of differences between the attached designs against the designs exhibited in the EES below.

• FERNBANK – GLENALADALE ROAD NORTH (FGR-North)

EES - Proposed to be permanently diverted to the north of the Stage 1 mining area with a new intersection on the Bairnsdale Dargo Road, north of the Fingerboards intersection

Proposed Design – FGR-North to be temporarily diverted to the south, with a new intersection on the Bairnsdale Dargo Road, east of the Fingerboards intersection. Road returns to current alignment after 3 years

Reasons for changes -

- Topography of the land to the north is undulating with several drainage creek crossings.
- Reduced speed limit to 70kph likely for intersection SISD.
- Landowner resistance to the permanent relocation of the road (Stephenson land).
- Topography for the southern diversion is flat with good intersection sight distance on BDR intersection.
- Temporary relocation return FGR-North to its current alignment after year 3-4 and resolves land tenure concerns.

• BAIRNSDALE DARGO ROAD – NORTH (BDR-North)

EES – Proposed to be permanently diverted to the east of current alignment in three stages. Connects with BDR-East and FGR-South with a new permanent roundabout to the south of the current Fingerboards intersection.

Proposed Design – BDR-North is temporarily moved to the east for a period of ~18 months, during which the existing alignment is mined and then moved back to its current alignment north of the Fingerboards intersection. The section of road not returned to the current alignment, is moved permanently to the west of the current alignment with a new roundabout constructed to connect the FGR-South, BDR-East and BDR-North.

Reasons for changes -

- Landowner resistance to the permanent relocation of the road (Stephenson land).
- Removes a road relocation stage on the FGR-South in year 12.
- Overall less relocation stages and FGR south alignment remains unchanged.
- Permanent relocation of road to the west of current alignment is now located on land 100% owned by Kalbar.

• BAIRNSDALE DARGO ROAD – East (BDR-East)

- **EES** Proposed to be permanently diverted to the south of current alignment. Connects with BDR-North and FGR-South with a new permanent roundabout to the south of the current Fingerboards intersection. Road is temporarily moved off the current alignment for a period to enable mining, after which it is returned back to the current alignment.
- **Proposed Design** Generally identical to the EES proposal with only change being that the new roundabout has moved further to the West onto the current FGR-South alignment.
- Reasons for changes
 - o Generally similar to the EES
 - o Roundabout moved further west to avoid diversions to the FGR-South.
- FERNBANK GLENALADALE ROAD- South (FGR-South)
- **EES** Road is diverted to the east to enable connection to the new roundabout with the BDR- East and North.
- **Proposed Design** Road is no longer diverted as the roundabout moved west to the current FGR-South alignment.
- Reasons for changes
 - Advantageous to undertake less disturbance to the existing road.
- SUMMARY
- All relocations in land currently owned by Kalbar or landholders that are open to a future transaction.
- FGR-North no longer permanently diverted.
- Less road upfront pre-operational road diversion stages.
- All designs and intersections confirmed to be Austroads design guidelines compliant.

Regards

Stefan Wolmarans



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