Route Options Assessment Matrix – Option 1 v Option 2A v Option 2B

	Option 1 – Boundary Road	Option 2A – Rainier Ave	Option 2B – Collins Road	Preferred Option	
Assessment Criteria	**Overall Assessment**				**Comments**
Connectivity and Active Transport	Moderate	Moderate	Strong	**Option 2B**	• Option 1 provides the most direct route to the school and Hillview Reserve plus future development at Pats Paddock. • Option 2A connects residential and industrial areas, provides future integration with the Principal Pedestrian Network along Nepean Highway and enhances long-term connectivity. • Option 2B creates a potential link to Pats Paddock and then shifts north to create a pedestrian link through the industrial area and future integration with the Principal Pedestrian Network along Nepean Highway. • Sufficient reserve width exists to provide separation between the shared path and dog activity areas, maintaining functionality and reducing potential user conflicts through detailed design for Option 2A. • Secondary school students are generally willing to cycle up to 5 km where safe and direct routes are available, with route quality and terrain being key influences on participation.
Biodiversity	Low	Strong	Moderate/Strong	**Option 2A & 2B**	• Option 1 impacts approximately 1.198 ha of native vegetation and passes through potential swamp skink habitat. • Option 2A reduces vegetation impacts to approximately 0.448 ha and largely avoids environmentally sensitive areas. • Native vegetation impacts for Option 2B have not yet been quantified; however, preliminary assessment

					suggests impacts would be slightly greater than Option 2A but significantly less than Option 1.
Constructability	Moderate	Moderate	Moderate	**All three options are equal**	• Option 1 has lower infrastructure requirements (one signalised crossing), however there are significant constructability constraints including steep topography, creek crossings and dense vegetation. • Option 2A & 2B require more infrastructure (two signalised crossings) but follow a less constrained corridor to that of Option 1.
Road Safety	Moderate	Strong	Mod/Strong	**Option 2A**	• Option 1 would place users adjacent to higher speed traffic for a greater distance, 80km/h for most of the route. • Option 2A follows a 50 km/h road environment and utilises Maryfield Lane as an alternative to the 100 km/h Nepean Strongway section. • Option 2B utilises Maryfield Lane and briefly traverses the 80 km/h sections of Boundary Road and Collins Road. However, a speed reduction may be justified in light of the proposed development in this area.
Long-term strategic benefits	Moderate	Strong	Strong	**Option 2A & 2B**	• Option 2A and 2B provide the greatest long-term strategic value by supporting future integration with the Principal Pedestrian Network along Nepean Highway, creating a new active transport connection between residential and industrial areas, improving access toward ALDI and Country Club Drive. • Option 1 provides a direct connection to Dromana Secondary College, while also supporting potential future network expansion to the Hillview Reserve mountain bike trail network and Pats Paddock.
Passive surveillance	Low	Moderate	Moderate	**Option 2A & 2B**	• Option 1 follows the Boundary Road CFA fire track, with the proposed shared use path located approximately 30 metres from Boundary Road, within the road reserve for the first 1.6 km west of the Boundary Road shops. The route then traverses a substantial trench and valley approaching White Hill

					Road. While the dense vegetation provides a buffer from the road corridor, it also limits visibility and passive surveillance, resulting in potential personal safety concerns for path users. • Option 2A presents fewer passive surveillance concerns, as the route primarily follows the residential environment of Rainier Avenue and the industrial precinct along Brasser Avenue. Some passive surveillance and user safety considerations remain within the Rainier Avenue Dog Reserve and along Brasser Avenue, particularly due to the nature of adjacent industrial land uses, heavy vehicle movements, and the potential for conflicts between path users and vehicle traffic. Some sections of the route are located in proximity to the Nepean Highway corridor and may experience reduced passive surveillance and user amenity associated with the adjacent 100 km/h road environment. • Option 2B presents similar passive surveillance considerations to Option 2A along Nepean Highway, without the limited passive surveillance of Option 2A within the Rainer Avenue Dog Reserve and Brasser Avenue.
Cost efficiency	Low	Low	Low-Moderate	**Option 2B**	• Options 1 and 2A are both estimated to cost in the order of $3.7-4.3 million. The marginally higher cost associated with Option 2A is primarily attributable to the inclusion of an additional pedestrian operated signal (POS) crossing. • Option 2B is expected to have a comparable cost to Option 2A. However, there may be opportunities to integrate sections of the shared use path with the proposed Boundary Road and Collins Road development, which could reduce Council's delivery costs for this section of the route.
Overall Assessment	Moderate	Strong	Strong		

Strongest Option				**Option 2B**	**Reason:** Provides the strongest balance of connectivity, strategic network benefits, reduced environmental impacts, acceptable passive surveillance outcomes and potential cost-sharing opportunities through future development.

Discussions on Route Options Assessment Criteria – Option 1 v Option 2A v Option 2B

Connectivity and Active Transport

All three options improve connectivity to key destinations, with Option 1 offering the most direct access to the school, Hillview Reserve and future development areas. Options 2A and 2B provide broader network benefits by linking residential, industrial and future growth areas, while supporting integration with the Principal Pedestrian Network along Nepean Highway and enhancing long-term walking and cycling connections.

For Option 2A, the available width at the Northern end of the dog off-leash reserve provides sufficient space to accommodate physical separation between the shared path and dog activity areas, with the final treatment to be determined during detailed design. Consideration could also be given to converting the off-leash area to an on-leash area to better integrate dog walkers with the broader path network and minimise potential conflicts between park users and active transport users.

The steep gradient along Boundary Road approaching White Hill Road may reduce the attractiveness and usability of Option 1 for cyclists, particularly secondary school students, despite the route being within the recognised cycling catchment. An alignment along the verge of Boundary Road has been considered however due to adjacent vegetation, the narrow verge, steep embankments and proximity to the 80km/h traffic, this option isn't feasible.

The Victorian Education Department guidance indicates that secondary school students are generally willing to cycle to school over distances of up to 5 km, provided safe, direct and continuous cycling routes are available. It also highlights that factors such as terrain, social attitudes and carrying school equipment can influence cycling participation, making high-quality cycling infrastructure critical to supporting active travel to school. Please refer to Attachment 3 for more information and

guidance on the typical cycling distance, legal riding environment, key barriers to participation, and the route characteristics required to support secondary school students cycling to school.

Biodiversity Assessment

Prior to community consultation a preliminary ecological assessment (Attachment 4), this showed that Option 1 had a significantly higher impact to biodiversity compared to option 2 in terms of both value of biodiversity impacted and area of biodiversity impacted.

Following community consultation, Council's natural systems team conducted a further internal biodiversity review. This further biodiversity assessment conducted by Council officers identified significant constraints with Option 1, including impacts on threatened species habitat, endangered ecological vegetation classes and the removal of more than 1 hectare of native vegetation. These impacts would likely result in additional environmental approvals, higher offset requirements and increased delivery risk. In contrast, Options 2A and 2B present substantially lower biodiversity impacts, largely avoiding known high-value habitat and significantly reducing native vegetation removal and approval requirements. For a detailed assessment of the biodiversity impacts associated with each alignment option, including native vegetation impacts, threatened species considerations and environmental approval requirements, refer to Attachment 5.

The preliminary ecological assessment and Council's internal biodiversity review both identify Option 1 (Boundary Road) as having the highest biodiversity constraints due to native vegetation and fauna habitat values. The internal assessment confirms the presence of habitat for threatened species and further strengthens the case for Options 2A and 2B, which are expected to have lower environmental impacts, approval risks and offset requirements.

Strategic Planning and Land Use Integration

From a strategic planning and land use integration perspective, Options 1 and 2B interface with land currently subject to proposed Planning Scheme Amendment C249morn, including a proposed conservation reserve intended for biodiversity protection.

All three alignment options provide strategic opportunities to improve access to key community destinations, including Dromana Secondary College, Hillview Reserve and the future Pats Paddock precinct. Option 1 provides the most direct connection to Hillview Reserve and offers the strongest immediate link to future recreational opportunities at Pats Paddock. While Options 2A and 2B are less direct, they provide broader network benefits by improving connections between residential and industrial areas and supporting future integration with the Principal Pedestrian Network along Nepean Highway. Option 2B also provides an opportunity to support future access to Pats Paddock while strengthening longer-term network connectivity through the Collins Road corridor and Principal Pedestrian Network.

Constructability

All options assume construction of a concrete shared user path and include pedestrian operated signal (POS) crossings to facilitate safe road crossings. Option 1 requires only one POS crossing and provides the most direct route; however, it presents notable constructability challenges due to steep terrain, creek crossings, dense vegetation and associated environmental constraints. In comparison, Options 2A and 2B require two POS crossings but generally follow less constrained corridors, reducing construction complexity and delivery risk. Refer to Attachment 6 for further details on the proposed pedestrian operated signal (POS) crossings, including their locations and function within each alignment option.

Option 2B traverses land that is subject to a proposed development. This may provide opportunities to coordinate future path delivery with development outcomes; however, no such arrangements have been assumed as part of the current assessment.

Passive Surveillance

Passive surveillance considerations vary across the three alignment options. Option 1 presents the greatest challenge, as the path would be located away from the road corridor for extended sections and traverse areas of dense vegetation, trenching and varied topography, resulting in reduced visibility and fewer opportunities for passive surveillance. In contrast, Options 2A and 2B benefit from greater exposure to surrounding residential and industrial land uses, providing improved levels of passive surveillance. For Option 2A, some user safety considerations remain along sections of the industrial area due to heavy vehicle activity and potential conflicts with vehicle movements. Passive surveillance may also be reduced within the Rainier Avenue Dog Reserve, as the reserve is generally bordered by the rear boundaries of residential and industrial properties, resulting in limited active frontages and natural surveillance. The level of passive surveillance along sections of Option 2B may increase if

the proposed Boundary Road and Collins Road development proceeds. Refer to Attachment 7 for further details regarding the passive surveillance assessment for each alignment option.

Road Safety

From a road safety perspective, Option 1 is the least favourable alignment, as it would place path users adjacent to an 80 km/h road environment for most of the route and includes sections with reduced passive surveillance. Option 2A provides the strongest road safety outcome, predominantly operating within a 50 km/h road environment and utilising Maryfield Lane to avoid the 100 km/h section of Nepean Highway. Option 2B provides similar safety benefits to Option 2A through the use of Maryfield Lane; however, it includes short sections along Boundary Road and Collins Road, which are currently subject to an 80 km/h speed limit.