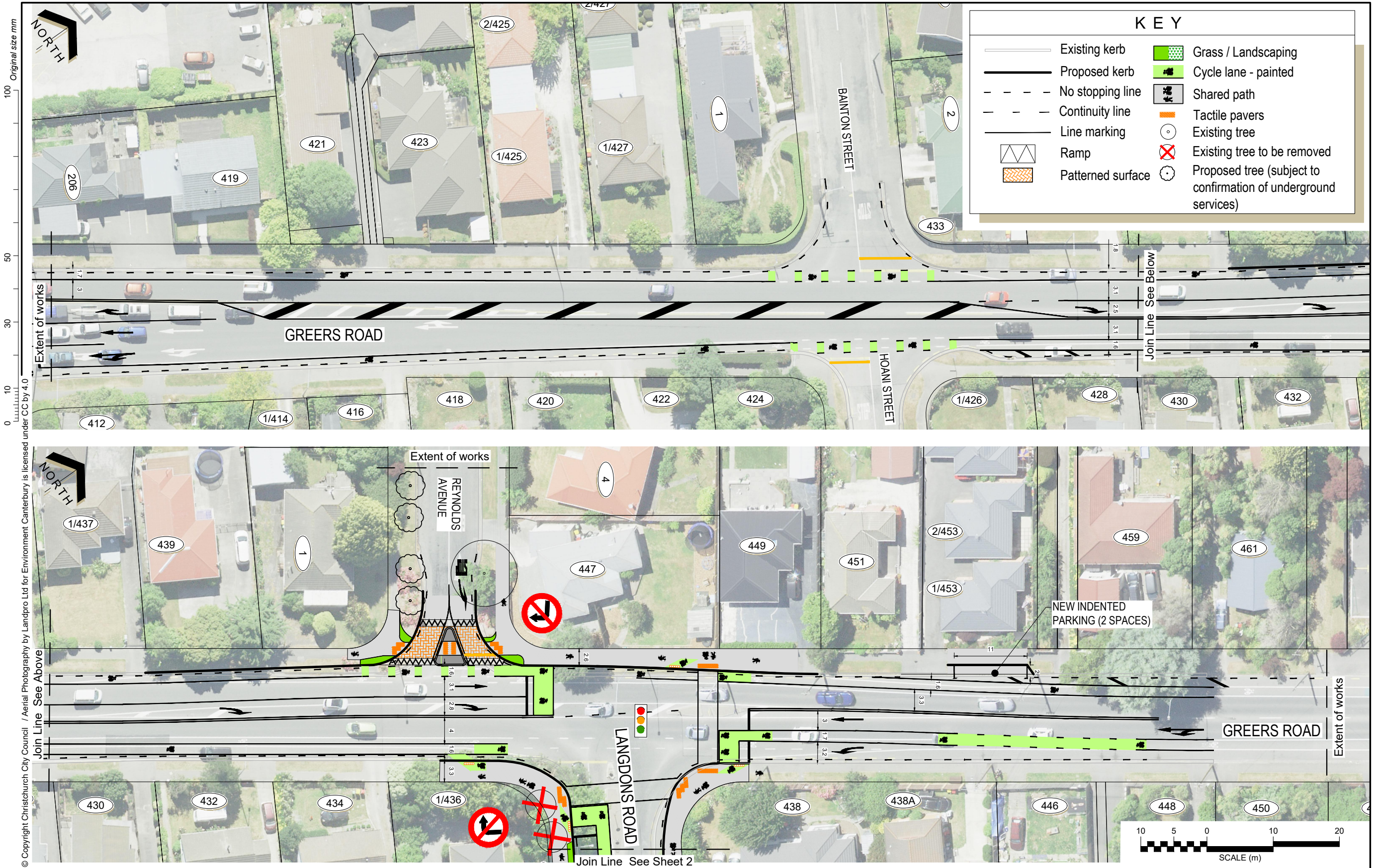
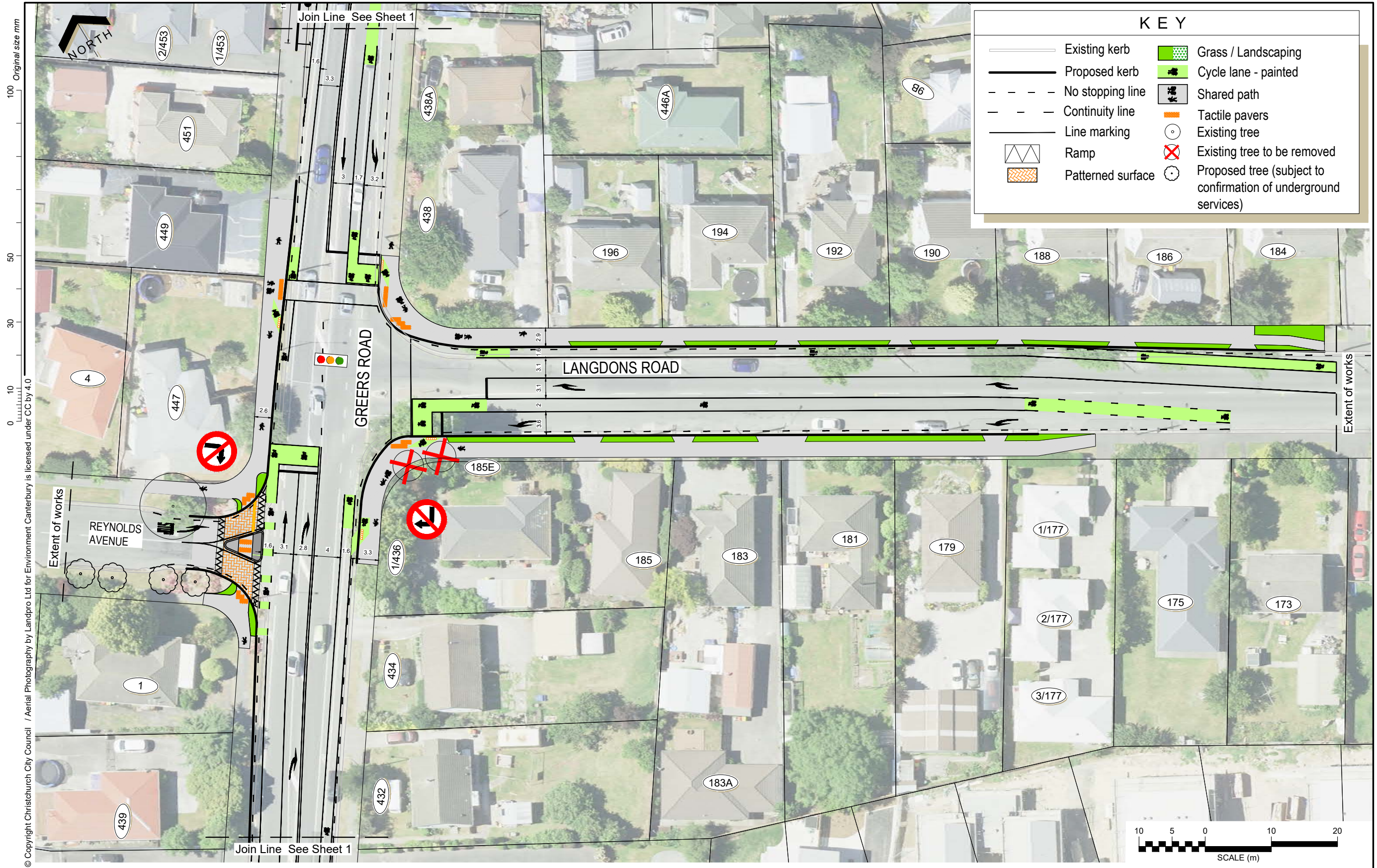

Christchurch City Council
ATTACHMENTS - UNDER SEPARATE COVER

Date: Wednesday 7 February 2024
Time: 9.30 am
Venue: Council Chambers, Civic Offices,
53 Hereford Street, Christchurch

TABLE OF CONTENTS NGĀ IHIRANGI	PAGE
7. Greers/Langdons Roads Traffic Lights	
A. Greers-Langdons Preferred Option for Approval	3
B. Greers and Langdons Road Intersection Upgrade - Submission Table (Public) - 20231113	5
C. Greers-Langdons Scheme Assessment (without appendices)	44
D. Resolutions for Greers-Langdons Alternative Option	130
E. Greers-Langdons Alternative Option Plan	134





Submissions received on Greers and Langdons Road intersection upgrade, November 2023

Would like to speak to the Community Boards

ID	Upgrade improves safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
12318	Yes	Congestion of traffic on Langdons and Greers is building and something definitely needs to be done.	frequent Northlink/ Northlands Mall; live nearby	Option for Reynolds left in and left out is a better idea, especially for emergency services. We had to call an ambulance for a family member on one occasion and having efficient access on this road is vital in an emergency - every minute counts. There is too much risk people trying to turn, or go the wrong way and/ or frustrated due to traffic build up, so lights would be beneficial. We have lived here for 5 years, and don't believe rat-running through Reynolds is a problem (although maybe for busy times of the day)	Option 1: Reynolds Ave changed to left in/left out	The left in/out option would be better for people coming out of Reynolds road as it is a long way to exit out on this side of Reynolds Road. There are time where it is better off to walk, especially during Easter and Christmas time as traffic gets to congested for those heading to Northlink. Turning into right into Reynolds is too risky, so we don't even go that way - we head to Sawyers Arms road to head home into Reynolds.	Rebecca Hinkley
11771	Other	The "rat-running" will be further increased through Bainton Street, worse than it already is	live nearby	Both the proposed options for Reynolds ave will further impact Bainton street "rat-running". If Reynolds ave is made into a cul-de-sac or left in left out, residents and increased other traffic will use Bainton Street to either try to miss the new Langdons road light intersection or to avoid the current Harewood road roundabout and Harwood/Greers intersection lights. Plans need to be made to apply the same ideas to Bainton street, considering Reynolds already has numerous speed humps. The Proposed cycle way additions to Harewood road will further affect the neighbouring Streets.	Option 2: Reynolds Ave changed to a Cul-de-sac	Option 2 would be preferred assuming the Bainton street intersection and the traffic using it are considered.	Aron South
12330	Somewhat	Truck turning radius will be reduced due to cycle way at the end on Langdons Road	work nearby	There are many workers in the vicinity who need road side parking - it is not practical to remove parking and replace with cycleways. you have a huge industrial park with hundreds of workers. This needs to be taken into serious consideration. speed signs need to be erected more frequently down the road particularly outside the industrial park	Option 2: Reynolds Ave changed to a Cul-de-sac	option 2. at least this would reduce conjection when you are hell bent on narrowing the road	Garry Whall - Turbo Care NZ, Managing Director
12341	Yes	Please see the Spokes submission	other	See Spokes submission attached.	Option 2: Reynolds Ave changed to a Cul-de-sac	This is the safest option for cyclists, pedestrians and other forms of active transport. Full submission attached.	Anne Scott - Spokes Canterbury, Submissions Coordinator
11968	No	it is another localised constraint not solving but increasing wider traffic problems - please get familiar with the theory of constraints	commute through here; frequent Northlink/ Northlands Mall	This intersection must not be looked at in isolation from the bigger issue of traffic around the Papanui commercial area (mall + more). Specifically installing traffic lights this close to the Harewood Rd - Greers Rd intersection is most likely creating more traffic jams, backed up traffic and thus unsafe driver behaviour. At the very least these traffic lights need to be synchronised with the traffic lights at Harewood/Greers Rd intersection in such a way that traffic can flow. There are now countless examples across Christchurch that demonstrate the issue - worst of all Blenheim Rd. Traffic planners in CHCH have taken	Other: Tell us how to improve this intersection	no right turns from Greers into Langdon (coming from Harewood Rd) no right turns from Langdons into Greers single on demand pedestrian light with corresponding non-turning lights on Greers into Langdons no traffic lights on Greers (except the above non-turning light on Greers	Ulrich Bergler

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Upgrade improves safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
				a liking to traffic lights but they do not solve the issues, they make them worse. Local optimisation leads to sub-optimal systemic solutions!!			
12310	Somewhat	Signalised intersection will make it easier for traffic on Langdons Rd to turn right on Greers.	frequent Northlink/Northlands Mall	All that is needed is traffic lights for reasons known. There is no need to do any other changes such as altering roads to cul to sac and removing parking. Nothing else needs to change. There is no need to make the project any more complex or larger than it needs to be. Sometimes, simpler is better! As is the case here.	Other: Tell us how to improve this intersection	I do not prefer either of the two presented options.	Shirish Paranjape
12338	Yes	This intersection is really busy now and very unsafe for people cycling, scooting and walking. Traffic signals are required to make sure people walking, scooting, and cycling can safely cross Greers Road, and to enable vehicles to safely turn right	live nearby; frequent Northlink/Northlands Mall; other	<p>I cycle between my home (just off Gardiners Rd) and Northlink/Northlands/Papanui Library/Graham Condon/Mitre10/other adjacent businesses via Reynolds Ave and Langdons Rd, and Bainton St on the return journey (due to too many queued vehicles on Greers waiting to turn right into Langdons). The Wheels to Wings cycleway needs to be built as soon as possible to make this journey safer for cyclists (while also providing safer to access to Bishopdale Village Mall, Harewood Veterinary Hospital (yes, I take my cats on my cargo bike), and other places along Harewood Road). Safe connections need to be made to other local places, such as Bishopdale School and Papanui Preschool & Nursery, so I fully support cycle lanes and shared paths wherever they can be installed, especially if they connect to cycleways.</p> <p>Full submission attached.</p>	Other: Tell us how to improve this intersection	<p>Other – left-in only to Reynolds Ave (option 4c in the webinar). This option provides better access for residents and emergency services (without adding additional traffic to Harewood Rd, Highsted Rd, Greers Road north of Reynolds Ave, Sawyers Arms Road, and Reynolds Ave) without compromising as much on safety compared to the left-in, left-out option. If I was to choose between options 1 (left-in, left-out) and 2 (cul-de-sac), I would choose option 2 as it's the safest option. I don't live in the lower part of Reynolds Ave, I just travel through there on my bicycle/cargo trike. I'd love to know what the residents want, and how we can reach a safe compromise for the greater good.</p> <p>The webinar showed that option 4c (left-in only to Reynolds) included a pedestrian/cycle crossing across Greers Rd south of Langdons Rd at the intersection. This crossing is crucial for the safe passage of cyclists and pedestrians without inconveniencing them unfairly (and thus encouraging dangerous crossings of Langdons or Greers Rds). When is Sawyers Arms/Greers/Northcote intersection getting traffic signals? This was pushed out due to other projects receiving funding from central government, but this intersection desperately needs attention as the population out here grows with all the new houses being built in Casebrook.</p> <p>When is the Wheels to Wings cycleway and associated changes to the Bishopdale Roundabout being built? Locals like me have been waiting 10 years for this cycleway and we continue to risk our lives by cycling on the road in the meantime. The flow-on effect from making this end of Reynolds Ave a cul-de-sac is large due to other nearby intersections not functioning well currently.</p> <p>I am glad to hear (via the webinar) that traffic calming may be added to Bainton St, if needed, due to flow-on effects. Please set aside budget for this now, as it is highly likely to be</p>	Fiona Bennetts

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Upgrade improves safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
						<p>needed.</p> <p>This partial cul-de-sac treatment (option 4c) could allow for at least one tree to be planted in the intersection vicinity to visually narrow the space and encourage safer travelling speeds.</p> <p>Will there be a solid median installed to prevent illegal right-turns into Reynolds Ave, e.g. Rutland St and Westminster St? Please install a raised safety platform at Langdons/Greers Rd intersection to encourage slower travelling speeds. I note that the recent Safer Speed Plan consultation has Greers Road reducing to 40 km/h in the 10 year plan. I hope this can be done sooner, and a variable speed limit at school start/finish times for Bishopdale School (reduced further to 30 km/h) should also be installed as soon as possible. Please ensure the kerb renewals at the Langdons/Greers Intersection encourage slower speeds.</p> <p>Will the kerbs and channels be replaced on Langdons Rd? Will the road be completely rebuilt, or resealed? Currently, the camber on Langdons Rd is quite steep, which makes it difficult to ride a (cargo) trike.</p> <p>Will the shared paths around the perimeter of the intersections be clearly marked, with multiple ramps on and off, i.e. not reliant on using driveways to transition between riding on the road and riding on the shared path? This is made more difficult with the deep dish channels on Langdons Road. Note that cargo bikes and trikes can be 1 metre wide and 2 metres long, so need a wider flatter space to change between riding on the road and riding on a shared path (which also needs to be wide enough to not endanger pedestrians). Please install centreline and "keep left" markings on the shared paths on each side of Langdons Road to prevent head-on collisions between users on these shared paths.</p> <p>I cycle along Reynolds Ave and Langdons Rd to avoid using Harewood Rd or Sawyers Arms Rd, due to the lack of safe cycling infrastructure. I have tried to cycle along Bainton St and Hoani St, but crossing Greers Rd is near-on impossible due to the heavy traffic. Please make the cycle lanes as obvious as possible, i.e. more green paint all along cycle lanes, not just at the intersection (where drivers ignore cycle lanes and advanced stop boxes).</p> <p>I fully support installing traffic signals at Langdons/Greers intersection and restricting access to/from Reynolds Ave to</p>	

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Upgrade improves safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
						<p>make Greers Road safer and flow well.</p> <p>I fully support shared paths around the periphery of this intersection.</p> <p>I fully support clearly marked cycle lanes on all approaches to this intersection (and hope they are connected up to the Wheel to Wings Papanui ki Waiwhetū cycleway, once built).</p> <p>Here are some videos from a friend, just to show a cyclist's perspective while travelling along these roads in light traffic: https://www.youtube.com/playlist?list=PLlr42U_5l25rareHuFaVs7YEjdL6Ws1zG</p> <p>Full submission attached.</p>	

Organisations

ID	Improved safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
12123	Yes	Much improved and safer environment for all forms of mobility	other	I am making this submission on behalf of the Canterbury/West Coast Automobile Association District Council of which several Council members are regular users of the area.	Option 2: Reynolds Ave changed to a Cul-de-sac	Although both options are acceptable to my Council, option two offers the best safety outcome for all forms of mobility. Although there is a considerable loss of parking with both options, we believe there is sufficient alternative parking available in the area to offset that loss. The proposed changes will be welcomed by all users familiar with the current layout.	John Skevington - Canterbury/ West Coast Automobile Association District Council, Chair
12405	Yes	This is the safest option for pedestrians, and others on the footpath such as children using scooters to get to Bishopdale School.	other		Option 2: Reynolds Ave changed to a Cul-de-sac	<p>The cul-de-sac option allows pedestrians to walk across the intersection to Reynolds Ave using a direct route. It also has a safe in and out option into Reynolds Road.</p> <p>We'd prefer that people on bikes go from Langdons Road, across Greers Road, with access to a facility that is NOT a shared footpath to avoid conflict with pedestrians, particularly the vulnerable ones.</p> <p>Living Streets Ōtautahi support the new traffic lights here for optimal safety for crossing</p> <p>The camber on Landgons Road is quite steep which makes it difficult for accessibility trikes and mobility scooters users who say the sensation of even a slight slope can make them feel like they are going to tip over.</p> <p>Living Streets Ōtautahi recommend a solid median or flexi-poles at Reynolds Road to stop vehicular transport cutting through.</p> <p>Please consider traffic calming on Bainton Street otherwise it may be used as a rat run street</p> <p>Please push out the corners both into and out of Langdons Road to slow the traffic down when they turn. It should be</p>	Meg Christie – Living Streets Ōtautahi

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

						designed for cars to turn at less than 30km/h Creating a cul-de-sac means there will be a pocket park- some seating and larger trees for shade would be appreciated for vulnerable users to rest on their journey. For blind or low vision pedestrians, directional tgsi are required to locate the signalised crossings as there are no other environmental features The radii of the corner (by 438 Greers Road?) should be reduced. This will improve the crossing for pedestrians and improve the layout of the warning tgsi. Directional tgsi (where parallel to the path of travel at 300 mm width or 600 mm if the approach is not parallel) need to be installed near the kerb at the cycle entry/exit locations (not shared signalised crossings where green warning tgsi would be installed). This guides blind or low vision pedestrians not to inadvertently enter the road by walking down the kerb ramp, ie to stay on the footpath.	
11882	No	Will cause more congestion which aggravates motorists. Preventing rat runs doesn't improve safety	frequent Northlink/ Northlands Mall	Just widen Langdons road so there are separate right and left turning lanes so left turning traffic isn't held up by right turning traffic. This will improve the flow of traffic.	Other: Tell us how to improve this intersection	Just widen Langdons road so there are separate right and left turning lanes so left turning traffic isn't held up by right turning traffic. This will improve the flow of traffic.	Christchurch Citizens Collective - Spokesman

Individuals

ID	Improved safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
11759	Yes	It is hard to turn right or left onto greers	frequent Northlink/ Northlands Mall; work nearby; commute through here; live nearby		Option 1: Reynolds Ave changed to left in/left out	Look forward to lights being put in here and making the corner safer for everyone	Aimee Bonner
11761	Yes	Fewer drivers taking risks to turn. Better visibilty	live nearby; frequent Northlink/ Northlands Mall	This intersection is currently frustrating and I usually avoid it and take a rat run instead.	Option 1: Reynolds Ave changed to left in/left out	I think Option 1 is best because with Option 2 the removal of access to/from Reynolds Ave requires a very large detour if it can't be accessed from Greers Road.	Beryl Brice
11766	Yes	Ive seen so many close calls of drivers taking gaps that are not there.	work nearby	We sell Caravans on Langdon's road so a signaled intersection would make it much safer for our clients that currently try and navigate there way around Northlands mall to get to the motorway.	Option 1: Reynolds Ave changed to left in/left out	I think option 1 would be better for the residence of Reynolds. Im only really interested in the signals being installed.	Simon Nathan
11768	Yes	Far too many people use Reynolds for a short cut, causing back up of traffic.	live nearby	Love both ideas of the plan, and left in left out may be of help, however I believe most people use Reynolds and Drysdale Street for a short cut to the mall. If a left in and out at Reynolds ave end is installed, I think you should narrow Drysdale Street's entrance, just to slow traffic and maybe prevent the short cuts	Option 1: Reynolds Ave changed to left in/left out	Chose in and out left for the use of residents.	Susan Whitaker

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Improved safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
				to the mall, or at least add more speed bumps. Closing off Reynolds may result in traffic using Bainton Street. Agree something has to be done, however do it correctly to prevent traffic build up at certain times.			
11769	Yes	Drivers get frustrated and make silly choices. It is also dangerous for kids and elderly crossing the road.	live nearby	I live at 447 Greers and have seen many accidents and hear the frustrations of drivers, there are may horns tooting every day. I avoid turning right out of Reynolds except for outside of peak times. I will take the long way around via sawyers arms or harewood just to avoid the line up on langdons.	Option 1: Reynolds Ave changed to left in/left out	Re the cul-de-sac option. Apart from the quiet aspect, I don't like the idea of not being able to exit onto Greers. An alternative exit north on Reynolds ave is a long way away. The only other option i could think of is a 'keep clear' zone similar to Rugby Street/Papanui Rd intersection.	Julia Shier
11770	Yes	Safer options to cross Greers Rd	live nearby; commute through here	I live in Reynolds Ave and cycle daily over the intersections with Reynolds/Greers/Langdons Rd's. These intersections for both cyclists and cars are now unsafe due to larger volumes of traffic since the opening of Northlink. To have safer crossing options and designated bike lines all the way on Langdons Rd is very beneficial to me.	Option 1: Reynolds Ave changed to left in/left out	Having Reynolds Ave turned into a culdesac will be very restrictive on those living in this street. Having the two left turn options is a safe one in my perspective. I do not use the right turn option onto Greers Rd simply due to congestion and removing this is a positive. I do use the right turn option onto Reynolds from Greers but think removing this is a safe option as when sitting at this intersection you do feel vulnerable waiting to turn.	Nicki Watts
11772	Yes	It's much too congested at the moment and I'm positive accidents will happen if it isn't improved.	live nearby; frequent Northlink/ Northlands Mall		Option 1: Reynolds Ave changed to left in/left out	Traffic lights on langdons road with free left turn with separate lane onto greers road would reduce congestion considerably.	Claire Hawkins
11775	Other	I have no information on how many crashes there has been at this intersection so cannot comment if this upgrade will improve safety at all.	live nearby; commute through here; frequent Northlink/ Northlands Mall		Option 1: Reynolds Ave changed to left in/left out	I live on Reynolds Avenue and prefer Option One. Option One will allow all residents easy access onto Greers Road and also from Harewood Road intersection to turn left onto Reynolds Ave. Option Two will put far too much pressure on the cnr of Drysdale & Highsted Roads plus more traffic going through the roundabout. The more traffic using Drysdale Street (from Highsted) to turn right into Reynolds Avenue increases more risk to crashes. Many drivers coming along Reynolds Ave (from Sawyers Arm Road direction) to turn right onto Drysdale frequently cut this corner endangering everyone. More traffic, more risk. So Option One for me thanks.	Shivonne Ross
11776	Yes	Traffic lights are needed to let people safely turn right from Langdon's onto Greer's	frequent Northlink/ Northlands Mall; live nearby		Option 1: Reynolds Ave changed to left in/left out		Michelle Ryan
11777	Yes	Turning right out of Langdons is currently very difficult and lots of people make unsafe manoeuvres to get the gaps in the	frequent Northlink/ Northlands Mall		Option 1: Reynolds Ave changed to left in/left out	Left turn only gives the best use for local residents	Jess Aberhart

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Improved safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
		traffic. There is also nowhere for pedestrians to safely cross at current.					
11778	Somewhat	The traffic has increased considerably in the past 2 years	live nearby; commute through here; frequent Northlink/ Northlands Mall	I use this intersection multiple times a day. At certain times of the day this intersection can take a bit of time to navigate due to traffic and drivers inability to use the road rules.	Option 1: Reynolds Ave changed to left in/left out	I think this is the better option so access in and out of Reynolds Ave is still possible	Rebecca Macpherson
11779	Yes	People take huge risks trying to turn there	live nearby		Option 1: Reynolds Ave changed to left in/left out	Don't over complicate it! Just a simple cost effective set of lights and a couple of pedestrian crossings is all that's needed. Plus a second set of lights at one of the Northlink entrances	Carolyn Neame
11785	Yes	Heavy traffic flow has become dangerous and the inspection needs better controls	live nearby; frequent Northlink/ Northlands Mall		Option 1: Reynolds Ave changed to left in/left out	I am concerned that if Reynolds Ave becomes a cul de sac more traffic will short cut through Bainton st where I live. Cars drive dangerously at speed down Bainton already. Even if Reynolds becomes left in & left out I expect Bainton will receive more traffic. Could traffic calming measures in Bainton St be considered to mitigate this?	Fiona Caughley
11788	Yes	Because as it is now the cars turning into Langdons rd & turning into Reynolds ave clog up in the middle it's not safe & you can never get out if your wanting to turn out from Langdons onto Greers going right i don't bother i go a different way.	live nearby	I live on Oakland street off Langdons rd i drive this intersection daily it definitely needs some improving.	Option 1: Reynolds Ave changed to left in/left out	Definitely traffic lights it can be quite dangerous at times with cars turning from Langdons rd onto Greers going right.	Amanda Jayne Archbold
11790	Yes	We live in Reynolds Ave and regularly see crashes and dangerous driving at this intersection.	live nearby; frequent Northlink/ Northlands Mall; commute through here		Option 1: Reynolds Ave changed to left in/left out	Thank you so much! This will be awesome. Both options look good, and will improve safely. Thanks for cycle options too. When cycling with my daughter we have to cycle to the lights to safely cross Greers. This will be much safer!	Shelley Liken
11791	Yes	Because it will make it easier for cars to turn right, and people won't have to take risks. It will also stop drivers taking side roads to avoid the intersection	frequent Northlink/ Northlands Mall	There also needs to be traffic lights at Northlink- it's very hard to turn right when exiting, and turning left means getting caught in the traffic on the Main North Rd. Last time I left Northlink I turned left, thinking that taking the Main North Rd would be almost as quick as waiting to turn right. I didn't realise there were roadworks on the Main North Rd/ QE11 Drive intersection and it took over half an hour to get past that area. If I could have turned right easily from Northlink my trip home would have been much more efficient- and lights at Langdons/ Greers would be even better- I currently have to head to Sawyers Arms, turn left onto Northcote/ Greers, and back onto Sawyers Arms, which can also be slow. The traffic lights at	Option 1: Reynolds Ave changed to left in/left out	Option 1 looks like it would work best for residents of Reynolds Ave- assuming they agree	Elizabeth Samuel

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Improved safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
				Homebase are a good example of how lights at Northlink could work.			
11794	Yes	Like the idea of lights making it safer for people to get out of Langdons Road and right onto Greers Road	live nearby	I live in Reynolds Ave (Greers Road end), so use this intersection very frequently.	Option 1: Reynolds Ave changed to left in/left out	In terms of Reynolds Ave, very much prefer the left-in/left out. Residents of Reynolds Ave (with the cul-de-sac option) will otherwise need to head all the way to Sawyers Arms (if heading east) and turning right out of that end onto Sawyers Arms can be dangerous. Or otherwise go via Highsted Road.	Craig Liken
11799	Yes	It will reduce risky manoeuvres and also provide safe options for walking & cycling	frequent Northlink/ Northlands Mall; other	I use this route reasonably frequently when travelling on that side of town	Option 1: Reynolds Ave changed to left in/left out	I suspect a full cul de sac might result in some very large detour distances, so I think the left in/out option is a pragmatic halfway-house. The southbound lane on Greers has plenty of width in the plan (4m) so, to improve compliance with left-turning, I'd suggest adding a short solid narrow median just south of the intersection. Ideally with the left in/out option it would be great to provide a ped'n crosswalk on all three sides as with the cul-de-sac option; I would say that it's feasible to do so. I like the left-turn "slip lanes" for cycling at the intersection via the footpath. How about also providing one on the northbound through side as well, i.e. from immediately north of Reynolds Ave to in front of [REDACTED]? Best practice these days for cycle lanes across side roads is to use coloured green blocks (rather than a continuous strip); minimises wear & tear and saves on markings too.	Glen Koorey
11804	Yes	High wait times for all traffic resulting in unsafe driving	live nearby	Bainton street also gets used for rat-running and is often difficult to turn out of because of high volume traffic at Langdons intersection	Option 1: Reynolds Ave changed to left in/left out	Avoid Bainton street also becoming over run with more traffic	Stephanie Luoni
11806	Yes	Take ages to turn right into greers road	frequent Northlink/ Northlands Mall	Traffic light is a big help	Option 1: Reynolds Ave changed to left in/left out	A mini round about should work to slow down traffic so it is easier to turn	Chung Meng Ung
11808	Yes	This intersection is very difficult to use and get out of Langdons rd	work nearby	I work at Papanui High School	Option 1: Reynolds Ave changed to left in/left out	This honestly seems the most ideal change. I avoid this intersection due to how dangerous it is	Danielle Perrin-Castle
11811	Yes	Firstly right turning right out of Langdons Road cause a hazard for cars turning left blocking their vision. The only problem is that Greers road is designated a ring road and that will cause another banking up of cars on greers road.	commute through here; frequent Northlink/ Northlands Mall; live nearby	Also what about resealing Langdons Road as it is in a terrible state. I had some feedback in 2017 that from the railway to Greers road was to be resealed and that never happened. As the reference to Rat Runners thats another council saying as theres nowhere to go. Paul	Option 1: Reynolds Ave changed to left in/left out	Do not make Renolds Ave a Cil- De -Sac as this will compound traffic onto Highstead road.	Paul Amtman

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Improved safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
11817	Yes	Traffic congestion, people safety	frequent Northlink/ Northlands Mall	This will positively impact traffic flow and congestion for those going to Northlink / Northlands and also for those who are not visiting these areas, simply commuting through i.e. heading north out of town or towards the east.	Option 1: Reynolds Ave changed to left in/left out	It seems logical to keep Reynolds open for turning left into or left out of. Cul de sac doesn't seem necessary.	Grace Francis
11821	Yes	It's a nightmare to turn right out of Langdons. This will be a great change!	frequent Northlink/ Northlands Mall		Option 1: Reynolds Ave changed to left in/left out		Cate Goode
11822	Yes	Greers/Langdons is a busy intersection with a nearby school increasing vehicle and pedestrian activity at peak times in the day.	work nearby; commute through here	I work in Langdon's Road and travel through from North Canterbury to my workplace via this route.	Option 1: Reynolds Ave changed to left in/left out	I think access to Greers road from Reynolds Ave is necessary, however the proposed left only turns suggested provide safe access to and from Greers from Reynolds.	Louise Hoggart
11827	Yes	Will make the intersection safer for all users.	frequent Northlink/ Northlands Mall	The current scenario is unsafe and this is the best route to Northlink and Northlands Mall.	Option 1: Reynolds Ave changed to left in/left out	Signals would improve safety to greers/Langdons and making Reynolds a left in left out would make both intersections safer.	Vanessa Sears
11828	Somewhat	I don't believe it to be unsafe currently but the traffic lights will help flow the traffic	live nearby	I don't agree with the left in left out but I 100% disagree with the cul de sac. This will have a knock on effect to people using sawyers arms/ greers road intersection which I believe to be more dangerous when turning right currently as it is next to impossible at peak times.	Option 1: Reynolds Ave changed to left in/left out	Just add the traffic lights do need to change anything on Reynolds.	Janine Walker
11835	Yes	I currently live in this area and have witnessed many near crashes at this intersection. During peak traffic you could be sitting at this intersection for over 10 minutes waiting for your turn specifically if your turning right.	live nearby		Option 1: Reynolds Ave changed to left in/left out	I like the in and out as it will still keep it open for residents to get around how they want. a cul de sac might cut of flow to much and upset residence.	Amber Page
11841	Yes	So many cars hard to get out and can't see traffic due to size of the opening and how far other cars have to pull out	commute through here; work nearby; frequent Northlink/ Northlands Mall	Have to take detours to avoid this intersection because it adds less time! I'm scared to use it because I can't see anything	Option 1: Reynolds Ave changed to left in/left out	More visibility	Mikayla
11844	Yes	The intersection has become so congested at times, it has become dangerous.	live nearby	Right now the traffic turning on to Langdons road can back up considerably, blocking the road on Greers road, especially at peak hours. Since Northlink has come in, traffic has congested a lot at this intersection. I have sat at the intersection for up to 10 minutes, because someone has been trying to turn right onto Grees from Langdons. Traffic can get way backed up.	Option 1: Reynolds Ave changed to left in/left out	While my choice would be for option 1, and I realize that it makes the intersection area more dangerous being able to turn right out of Reynolds, it is also a long way round to get out of Reynolds to Highstead road. Thus the reason for choosing option 1. I do think though, that people will end up trying to get out there and doing U-turns to be able to head back toward town. I think this was happening on the	Andrew Falconer

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Improved safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
						Ilam/Riccarton road intersection where people were doing this.	
11853	Yes	Remove the right turning and impatient motorists taking chances with the traffic.	frequent Northlink/ Northlands Mall	Used to live local and understand the frustrations with the current scenario.	Option 1: Reynolds Ave changed to left in/left out	Option 1 solves the right turning issue. Backing up on the intersection with harewood rd will be important to resolve as the traffic is almost consistent both ways at rush hour and at weekends. Cul de sac option will sever the connections out of the neighbourhood and will not create a better outcome. Look foward to seeing the outcome and resolution here, but suspect this should have been dealt with at the time the development was being consented.	Jamie Irvine
11856	Yes	Too much traffic for there not to be traffic lights there, people are impatient and don't give way properly turning right	frequent Northlink/ Northlands Mall		Option 1: Reynolds Ave changed to left in/left out		Sara Hulena
11859	Yes	It will stop people being impatient and just pulling out. Will lower the number of crashes at the intersection and also make it safer for the children of the area to walk to and from school.	live nearby; frequent Northlink/ Northlands Mall; commute through here	I live close by this intersection I come out of Reyonolds ave daily to turn left onto greers road to make it easier than trying to make a right hand turn at sawyers arms road at 3pm. Option 1 will work better for everyone who lives that end of Reynolds Ave than to drive round the block just to get onto Greers road.	Option 1: Reynolds Ave changed to left in/left out	I live close by this intersection I come out of Reyonolds ave daily to turn left onto greers road to make it easier than trying to make a right hand turn at sawyers arms road at 3pm. Option 1 will work better for everyone who lives that end of Reynolds Ave than to drive round the block just to get onto Greers road.	Jess smith
11860	Yes	I live on Reynolds and you have to push your luck turning right onto it or off it	live nearby	I live on Reynolds and having traffic lights and preventing right turns would make this much safer	Option 1: Reynolds Ave changed to left in/left out	Option 1.	Jen Voss
11861	Yes	the traffic will have to stop with the lights. currently there can be periods where there is no break for 10s of minutes, causing some people to risk dangerous manoeuvres.	live nearby; commute through here; frequent Northlink/ Northlands Mall		Option 1: Reynolds Ave changed to left in/left out	Ideally, the traffic lights would be at Reynolds ave and Langdons Rd is left in / left out.	Shaun Mucalo
11862	Yes	I see risky manoeuvres due to impatience due to traffic backup.	frequent Northlink/ Northlands Mall	Lights are also needed at Northlink entrance.	Option 1: Reynolds Ave changed to left in/left out	Lrfg in and out should help alot	Nikki Hoare

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Improved safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
11863	Yes	Currently we have cars inching out to turn right from Langdons into Greers during busy times and it's causing chaos for those turning right into Langdons. The whole intersection is stressful and I'm surprised there haven't been more accidents!	frequent Northlink/ Northlands Mall; live nearby		Option 1: Reynolds Ave changed to left in/left out	Prefer the left in left out option far more than a cul de sac.	Rebecca Dawson
11864	Yes	Because it's difficult to use this intersection the way it is and dangerous	live nearby		Option 1: Reynolds Ave changed to left in/left out	Option 1 allows us to at least get in an out of Reynolds Ave from greers road. I frequently turn left out of Reynolds and left out of Langdons. My alternative would be doing a full circuit of the block just to go down Langdons road.	Christina Wood
11866	Yes	Not so dangerous	live nearby		Option 1: Reynolds Ave changed to left in/left out	Tafiic lights	Jocelyn Kinghorn
11868	Yes	It's too busy for the current layout. I've seen and been involved in close misses at this intersection. Controlled with lights will improve safety.	live nearby; frequent Northlink/ Northlands Mall	You're going to receive a lot of negative comments on cycle lanes. Keep them in. This partof the city is bereft of cycle lanes.	Option 1: Reynolds Ave changed to left in/left out	Option 1 provides a non-right turn option to leave the Reynolds Ave and offshoot cul de sacs area when wanting to head east along Northcote Rd.	Sean Clifford
11870	Yes	Traffic control	live nearby		Option 1: Reynolds Ave changed to left in/left out		Katelynn Beaven
11871	Yes	Since north link shopping centre opened the traffic volumes have increased significantly	live nearby	We live in Bainton street and support both lights at Langdon road and improved flow for Reynolds. I would like traffic calming considered for Bainton Street as when lights are installed or traffic direction altered, such as reducing entry to a Reynolds, then drivers take the path of least resistance, which will likely become Bainton street - which is narrow and cannot support heavy traffic flows. Thanks	Option 1: Reynolds Ave changed to left in/left out	I agree with lights to control flow, esp right turn	Craig McIntock
11886	Yes	At the moment it is an absolute trainwreck. We have lived off Reynolds	live nearby; frequent Northlink/ Northlands Mall;		Option 1: Reynolds Ave changed to left in/left out		Rachel Scott

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Improved safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
		Avenue for 20+ years and it is an absolute nightmare trying to get out of there especially in peak hour traffic.	commute through here				
11914	Yes	Bishopdale school children running a gauntlet of cars to get home across Langdons/Greers. Nearly impossible to turn right onto Greer's from Langdons some times of day. Leads to road rage and unsafe decisions.	live nearby; commute through here; work nearby	Thank you for doing something here before someone gets in a serious crash.	Option 1: Reynolds Ave changed to left in/left out	Personally doesn't greatly affect me whether I can access Reynolds but I feel people living on Reynolds will be inconvenienced by losing second entrance/exit. Reynolds can be useful cut through to avoid big intersection of Northcote and Sawyers arms rd.	Shannon Williamson
12007	Somewhat	Improved traffic lights will help. Cycle lanes are the bane of my life. In some areas the cycle lane and footpath could work well together if painted correctly on the footpath. eg Cranford and Warrington St	frequent Northlink/ Northlands Mall	Why the loss of so many car parks?	Option 1: Reynolds Ave changed to left in/left out	Reynolds St people and visitors should have right of egress and exit.	Sharyn McNaught
12058	Yes	When I want to go to Langdons Rd from Reynolds Ave, it takes ages before the traffic is clear from me to advance. Sometimes I risk going forward but its frustrating having to wait forever. Vice versa from Langdon Rd to Reynolds Ave.	live nearby; commute through here	For a 65+, it's scary trying to turn right from Reynolds Ave to Greers Ave, and from Reynolds Ave to Langdons Rd. Vice versa.	Option 1: Reynolds Ave changed to left in/left out	This is what we do now. To go out of our area we use Highsted Rd to Go to Greers Avenue. And its much safer and quicker. Especially during peak traffic.	Sunema Ofe
12062	Yes	Make traffic flow , reduce congestion at peak hours and blocking off residents trying to get in and out of there driveways, the intersection at	live nearby	Hi My wife and I live at [REDACTED] Langdon's road we own the property, we experience the increased traffic flow on a daily basis which is frustrating when its peak traffic and the delays with trying get in and out our driveway and the increased danger of accidents on a busy road especially at the Greer's road intersection. I think the changes suggested below would improve the traffic	Option 1: Reynolds Ave changed to left in/left out	Hi My preference is option 1 as it still allows entrance and exit to Reynolds via Greers road.	Anthony Kalauta

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Improved safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
		greers road has always been dangerous trying to turn right		flow and safety, my only concern which I don't have a solution for is that its a bit unfair taking away off street parking for those that live at the top end of Langdon's road. Regards Anthony Kalauta			
12132	Yes	I have seen many people become impatient with traffic when turning right from Reynolds Avenue onto Greers Road and make poor decisions. This change will reduce that.	live nearby	I live on Reynolds Avenue.	Option 1: Reynolds Ave changed to left in/left out	I avoid the intersection coming from Langdons Road onto Greers Road currently. With traffic lights in place I would use it again.	Aleisha Blake
12137	Yes	because it is impossible to turn right out of langdons rd and the people that do are frustrated and angry because of how long it takes	live nearby; frequent Northlink/ Northlands Mall		Option 1: Reynolds Ave changed to left in/left out	definitely feel that they need lights at the intersection to help with the traffic leaving langdons rd especially the right turning traffic. it is impossible at the moment and honestly terrifying. also the amount of times ive seen accidents nearly happen with traffic trying to turn right into reynolds have is too many and it is a hazard. i don't think it should be a culdesac but turning left in left out is a great solution	Rosalie Inkster
12139	Yes	Because it needs lights to control the flow of traffic out of langdons and greers and will improve access from Reynolds however I do not agree with the loss of parking in greers road and the cycle way is unnecessary!	live nearby	I don't agree with the need for a cycleway or the loss of on street parking however better traffic control with the use of lights is necessary hopefully with turning arrows!! Left turns from langdons could be a free turn possibly. Safety of school children for Bishopdale schoolchildren and pedestrian crossing should be priority. Not bicycles!	Option 1: Reynolds Ave changed to left in/left out	I don't agree with the need for a cycleway or the loss of on street parking however better traffic control with the use of lights is necessary hopefully with turning arrows!! Left turns from Langdons Road could be a free turn potentially. Safety of school children for Bishopdale schoolchildren and pedestrian crossing should be priority. Not bicycles! The speed limit should be lower here also for the school also. Reynolds Avenue should remain open and the left turn option is the most sensible but I don't agree with tree planting which will obstruct car drivers view! Planting trees on corner sections should be discontinued on grass verges for clear visibility!!! The road should not be narrowed as this is dangerous wider roads are safer! If you need to change direction you can without needing to pull over on yellow lines!!!	Melissa Inkster
12242	Yes	Too many drivers making bad judgements.	live nearby		Option 1: Reynolds Ave changed to left in/left out	This would be the best option to reduce traffic and create a better flow of moving traffic.	Gabby Petheram
12254	Yes	See attached (mailed in submission)	live nearby	Full submission attached.	Option 1: Reynolds Ave changed to left in/left out	If unable to access/depart from Reynolds Avenue if it is blocked off, it would mean more congestion at Sawyers arms/ Greers Road intersection which has no lights and is dangerously busy already. Full submission attached.	Sharon and Richard Gordon
12266	Yes	It's dangerous as it is, traffic build up	live nearby	My suggestion is that if you widen road and remove the berm which to me is no use to anybody we can still keep the on street parking. Which would benefit our 3 unites [REDACTED]	Option 1: Reynolds Ave	Basically, I think sometimes I do use that route and then I can turn left onto Greers from Reynolds to my house.	Kaye Ellis

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Improved safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
		and no one seems to be getting anywhere		We are all retired and none of us own a mower, and we have to pay to get the berm moved. When people come to visit, who are elderly where are they going to park, and we have a shared pathway that is for tenants, and we can't block it with visitors vehicles. An upgrade need to make safer for the children too. It's always been a busy road, but since Northlink has gone in there it's gone worse.	changed to left in/left out		
12287	Yes	The intersection is an accident waiting to happen and has needed lights for years due to the amount of traffic that turns in and out of it. Adding in a set of lights will greatly increase the safety and usability of the intersection	live nearby; commute through here; frequent Northlink/ Northlands Mall		Option 1: Reynolds Ave changed to left in/left out	<p>My partner and I are purchasing a house on Blossomdale Place (just off Reynolds Ave) and should be moved in before the end of the year. We knew when we put in our offer that we would seldom, if ever turn right out of Reynolds Ave due to the nature of the intersection and the amount of traffic that flows through it. That is something that we have accepted and planned workarounds for. However, fully cutting off access in and out of Reynolds Ave would be highly inconvenient for us and others who live in this section of housing off Reynolds Ave</p> <p>I believe the set-up in Option A will positively impact the intersection in question without detrimentally impacting those that live in this area. If the concern is that people will still 'cheat' the intersection, adding in a raised median along the centre line of Greers road going towards Langdons should be enough to ensure traffic flows smoothly and reduce rat-running. I don't see how turning Reynolds into a Cul-de-sac will provide any more benefit to the intersection than Option A but it will cause inconveniences to those that live in the area, especially those that turn into Reynolds from Greers as part of their commute home. Furthermore, Option B will reroute traffic towards the Bishopdale roundabout, which is also incredibly busy during peak hours and the dreaded Sawyers Arms and Northcote Road/Greers Road intersection just further up which itself is arguably already a worse intersection</p>	Samantha Lang
12288	Yes	The street in question is often very backed up and you often see people getting impatient and dangerously crossing lanes	frequent Northlink/ Northlands Mall; commute through here; live nearby		Option 1: Reynolds Ave changed to left in/left out	I feel a cul-de-sac would inconvenience so many people in the area. I feel still being able to go left is far better than completely blocking the area off and making a large amount of people have to change they way they go to work/malls. Greers rd is a road that you never go right coming from Reynolds rd due to having to wait forever to get a free moment to cross traffic, so removing the right turn won't inconvenience people as much	Hayden Charles Fuller
12290	Yes	People that turn right from Langdons are idiots	live nearby		Option 1: Reynolds Ave changed to left in/left out	Lights	Leanne Lang
12307	Yes	Any improvement is a positive to what it is now	live nearby; work nearby; commute through here;	Work Papanui High School and have just built nearby. The commute is absolutely horrendous and I feel unsafe on a cycle.	Option 1: Reynolds Ave	Thank you for addressing this! It is much needed.	Kylie Phaup-Stephens

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Improved safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
			frequent Northlink/ Northlands Mall		changed to left in/left out		
12311	Somewhat	It is dangerous for cyclists and pedestrians currently.	live nearby; work nearby; commute through here; frequent Northlink/ Northlands Mall		Option 1: Reynolds Ave changed to left in/left out	The cul de sac option for Reynolds will mean a troublesome exit at the other end where cars will find it almost impossible to turn right onto Sawyers Arms road, creating further backlog at peak times. Option 1 needs to be timed and/automated so that straight travelling traffic along Greers from the southern end do not get back-logged all the way back to Greers/Harewood intersection.	Leah World
12317	Yes	It is dangerous for cars to try to get out of Langdon's Road as they often turn left and then try to turn straight into Reynolds Ave to turn around.	live nearby	I live off Reynolds Ave and would like to be able to still exit left onto Greers road, as it is almost impossible to turn right onto Greers Road from the other end at Sawyers Arms road. By closing off the Greers Road end of Reynolds Ave, you would cut all the residents off in the area and force them to go backwards to Highsted road to exit the community.	Option 1: Reynolds Ave changed to left in/left out	See above comment.	Truus Dingemanse
12321	Somewhat	Concerned I will not be able to access my road easily.	live nearby; work nearby; commute through here; frequent Northlink/ Northlands Mall	Absolutely pleased something is being done about this , as its a major hazard and and accident waiting to happen! Out of the two options my preference is option 1 - faster access to emergency services - Require access to Langdons road	Option 1: Reynolds Ave changed to left in/left out	The alternative to get on my street is through Sawyers Arms Road which is already very congested or Harewood Road whereby the traffic light intersection requires a right hand turn into Greers Road as this becomes dangerous to turn as the lights turn red after one car has made the turn (if your lucky).	Alice Abdul Hussain
12322	Somewhat	people are idiots	live nearby		Option 1: Reynolds Ave changed to left in/left out	cul-de-sac is stupid	James Stott
12324	Yes	No current safe pedestrian or cycle crossing.	live nearby	I am a resident homeowner in Reynolds Avenue. My preference is Option 1. Option 2 could have significant impacts on residents as this is a high density housing area with a number of units and multiple vehicles per street address. The cul de sac option will automatically force all vehicles from Reynolds and the existing cul de sac at the lower Greers road end with no options but to commute through Reynolds to Drysdale or Sawyers arms.	Option 1: Reynolds Ave changed to left in/left out	Currently the lead up to the intersection doesn't have a long enough two lane access, and the lanes are narrow with right turners sometimes blocking left turning access. The cars back up a long way waiting to get into the left turning lane, slowing the flow of traffic.	Stephanie Giles
12326	Yes	Keep the traffic move smoothly	live nearby		Option 1: Reynolds Ave changed to left in/left out	I live on Reynolds Avenue close to Greer's Rd. I prefer to leave that road open so I can still get out from Reynolds Avenue to Greers Road. If it is closed, then I have to go around it to get on to Greers Rd which is quite not convenient.	Sandra Li
12332	Yes	Traffic can no longer turn right onto Reynolds Avenue, preventing possible issues with oncoming traffic on shared median.	live nearby; frequent Northlink/ Northlands Mall		Option 1: Reynolds Ave changed to left in/left out	It is great to see action in relation to the intersections of Reynolds Avenue and Langdons Road with Greers Road. Even before the development of Northlink, these two intersections were problematic. Traffic turning right onto Reynolds Avenue shares the same median as traffic turning right onto Langdons Road, which leads to situations where drivers on the median are blocked by oncoming traffic also on the median. Furthermore, turning right from Langdons Road onto Greers Road has always been difficult. This encourages dangerous	Robert Bruce

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Improved safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
						<p>behaviour at the intersection and increases pressure on alternate routes, such as Morrison Avenue.</p> <p>Of the two options presented, I favour Option 1 (Reynolds Avenue changed to left in/left out) for two key reasons. First, it provides a direct route from Reynolds Avenue to Northcote Road which does not require traffic to turn right onto Sawyers Arms Road. In my experience, this is often difficult during peak traffic hours. Second, it retains a degree of access between Reynolds Avenue from Greers Road which may be important if the two other access points are disrupted by road maintenance, natural disaster, future road changes, or other unforeseen issues.</p> <p>With respect to Option 1, I propose adding delineator posts between the north-bound and right turn lanes on the southern side of the Greers Road-Langdons Road intersection. This would discourage drivers turning left out of Reynolds Avenue from cutting across to turn right into Langdons Road.</p> <p>Given the small size of the site and its impact on many of the proposals discussed during the webinar, I am disappointed that land purchase was not considered. I fear the creation of a satisfactory long-term solution resilient to change has been compromised. That said, I understand why it is a constraint.</p>	
12333	Somewhat	either options are not really going to the stop the build up of traffic turning into Langdons rd and the traffic build up does not really come from Reynolds ave	live nearby; frequent Northlink/ Northlands Mall; commute through here	Out of the options offered for Reynolds ave, option 1 is preferable even tho turning right into Reynolds ave would be better as well, Option 2 is just penalising the residents that live at that end of Reynolds ave. Why can not the lights incorporate Reynolds Ave. I moved back to Christchurch from Auckland in 2018 and have found the traffic control system here baffling, as it is not logical esp the light systems across the city, example is the lights at Harewood and Greers there is a green light for right turning from Harewood to Greers coming from Bishopdale mall but not coming from Papanui Rd. It seems to me that the CCC Road Planners really need to be reviewed.	Option 1: Reynolds Ave changed to left in/left out	Out of the options offered for Reynolds ave, option 1 is preferable even tho turning right into Reynolds ave would be better as well, Option 2 is just penalising the residents that live at that end of Reynolds ave. Why can not the lights incorporate Reynolds Ave. I moved back to Christchurch from Auckland in 2018 and have found the traffic control system here baffling, as it is not logical esp the light systems across the city, example is the lights at Harewood and Greers there is a green light for right turning from Harewood to Greers coming from Bishopdale mall but not coming from Papanui Rd. It seems to me that the CCC Road Planners really need to be reviewed.	Lyall Crawford
12359	Yes	I'm all for the changes.	live nearby	I live opposite the school. My son goes to work at 5:30am and traffic is quite bad and busy in that time of the morning. Since Northlink shops, traffic has just become increasingly bad.	Option 1: Reynolds Ave changed to left in/left out	I'm all for the changes on the Langdons Rd/ Greers Rd. I think it's a wonderful idea as I've seen several cyclists children just about knocked off their bikes, so if that's any help to you. I'm 82 on a walker, and most motorists are good in letting people cross in the little island on the road. But I've seen children who are much smaller and are hard to see almost get hit.	Roberta Sheppard
11756	Yes	It will stop cars undertaking on the left without looking.	commute through here; frequent Northlink/ Northlands Mall	I commute through here to head to Harewood, burnside, and upper riccarton I also frequent Northlands Mall and Northlink	Option 2: Reynolds Ave changed to a Cul-de-sac	I support Option 2 Negatives: It will increase car travel times for people who live on Reynolds Ave as they will have to drive a short distance more.	Dave Gardner

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Improved safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
						Positives: It will make it safer for the Children in the area to get to Bishopdale Primary School by methods other than by car, which gives those family's more options for travel. It will lessen the traffic on Greers Road, as traffic that were using Greers Road to get to Reynolds Ave will now use Highstead Road or Sayers Arms Road. It will increase the traffic flow along Greers Road, as there will not be cars slowing down to turn into Reynolds Ave It will provide more Green space, which align with Christchurch City Councils Goals. It will quieten the area along Reynolds Ave, improving property prices. Will mean cars cannot even attempt to turn right into Reynolds ave It is dangerous having intersections so close together, this will make it safer	
11758	Yes	it will stop the congestion of traffic and right turning traffic into greers road will be able to turn safely rather than take risks	live nearby; frequent Northlink/ Northlands Mall		Option 2: Reynolds Ave changed to a Cul-de-sac	preferred option.	Natasha Ross-Boivin
11760	Yes	Safer to cross	commute through here; frequent Northlink/ Northlands Mall		Option 2: Reynolds Ave changed to a Cul-de-sac	Option two allows for three crossing and less chance of rat running	Josh Dell
11762	Yes	There is cars, bikes & pedestrians in all directions around here, it's hard to know where to look. especially around school start/finish time. Anything to control traffic and the number of directions traffic can go in is a great idea	frequent Northlink/ Northlands Mall		Option 2: Reynolds Ave changed to a Cul-de-sac	I like both options but if I was a resident I would prefer this option for less people using the road to turn around and causing more chaos	Kaylene Wakefield
11763	Yes	Traffic lights for turning will make the intersection flow smoothly and stop people turning dangerously	frequent Northlink/ Northlands Mall	Northlink/Northlands are the closest shopping centres to me, as well as using Graham Condon pool and the Papanui library	Option 2: Reynolds Ave changed to a Cul-de-sac	Whole of Langdons road needs to be resealed. Very bumpy	Grace Irwin
11764	Somewhat	It's not easy to make a right turn out	frequent Northlink/ Northlands Mall		Option 2: Reynolds Ave	I like that change will happen and while both options are good I prefer the second one	Victoria Ding

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Improved safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
		of langdons rd right now			changed to a Cul-de-sac		
11765	Yes	This is currently a very congested intesection with a lot of traffic that at times can be forced to wait for a long time. Lights will improve things as drivers turning will not have to wait as long and therefore are less likely to go for small gaps.	live nearby; commute through here	Live Cavendish and often commute by bike down this road (and sometimes by car). Continued from Safety question: Additionally stopping right turning in/out of Reynolds will reduce conflicts.	Option 2: Reynolds Ave changed to a Cul-de-sac	Either upgrade will be an improvement. As a cyclist the cul-de-sac is preffered option as with left in/out only in close proximity to a the lights there's a high possilbity of the cycle lane being blocked by traffic sitting over the cycleway while waiting to turn left. This could be cars inching out to try and have traffic let them in or cars waiting to turn left into Reynolds pulling left into the cycle lane in slowed/stopped traffic before the intersection itself.	Geoffrey Sugden
11774	Yes	Too many cars trying to turn right out of Reynolds Ave and taking great risks in doing so. Also those waiting to turn right off Greers into Reynolds run the risk of being hit from behind or getting hit trying to turn in the traffic gaps.	live nearby; commute through here; frequent Northlink/ Northlands Mall		Option 2: Reynolds Ave changed to a Cul-de-sac	Traffic lights and lights for pedestrians and cyclists for all turns in and out of Langdowns Road would benefit all. Putting cycle lanes diwn Langdons will only narrow the accessway even more. Its bad enough now. Repave Langdons Rd urgently. Bumpy and potholes appearing regularly.	Alexy Cowlin
11780	Yes	Traffic lights and cycle lanes will achieve this	frequent Northlink/ Northlands Mall		Option 2: Reynolds Ave changed to a Cul-de-sac	Overall this will improve turning right out of Langdons onto Greers. The current situation is a nightmare with long waiting times. Option 2 is best. Reynolds Ave is just too close to the proposed traffic lights so it needs to become a cul-de-sac.	Euan Gutteridge
11782	Yes	traffic lights will force some traffic to stop, allowing other traffic to go - rather than trying to judge a gap in the traffic stream.	frequent Northlink/ Northlands Mall	Pass or use this intersection frequently.	Option 2: Reynolds Ave changed to a Cul-de-sac	Changing Reynolds Avenue to a cul-de-sac will simplify the intersection allowing more traffic to pass, at a higher speed and more safely. Given that already working in this area, Greers Road should be 4 laned to Harewood Avenue or at least this intersection should be designed and built to fit in with the eventual 4 laneing of Greers Road.	Guy Mortlock
11783	Yes	Would make it easier to right turn from Langdons road	live nearby; frequent Northlink/ Northlands Mall	We would use this intersection if it was improved. Currently we're rat running down Morrison Ave to avoid it.	Option 2: Reynolds Ave changed to a Cul-de-sac		Rachael Drury
11784	Yes	Because if you put in traffic lights in it will make the exit off Reynolds Avenue have even worse	live nearby	We live at the cul-de-sac end of Reynolds Avenue but even having no exit onto Greers Road will still be a better option for us as we won't be able to use the intersection if it has traffic lights anyway, it's a bad enough intersection now without the	Option 2: Reynolds Ave changed to a Cul-de-sac	With the proposed tree planting it would help establish the end, I don't think much more is needed here	Paul Smith

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Improved safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
				lights, it will also help keep traffic moving on Greers Road (ring road)			
11786	Yes		live nearby		Option 2: Reynolds Ave changed to a Cul-de-sac	Will make turning onto greers road going north easier Also safer for people to cross	Miriam Maxwell
11792	Yes	With either decision it should help stop accidents when pulling out from Reynolds Avenue, as there is no courtesy currently between drivers when trying to use the junction.	live nearby	Personally I would like to mainly stop vehicles flying through the streets, there's not much room as is and the speed bumps work to an extent, but I hear vehicles crunching on them regularly. Ideally those speed bumps could be removed too?	Option 2: Reynolds Ave changed to a Cul-de-sac	Personally I would like to mainly stop vehicles flying through the streets, there's not much room as is and the speed bumps work to an extent, but I hear vehicles crunching on them regularly. Ideally those speed bumps could be removed too?	Ashley Richard Ellis
11793	Yes	Traffic lights allow cars to turn right onto Greers rd safely	live nearby; frequent Northlink/ Northlands Mall	I am concerned that the new lights will cause traffic to back up to the intersection of Harewood/Greers during busy times. It really needs 2 lanes of traffic each way from Grahams rd to Northcote rd.	Option 2: Reynolds Ave changed to a Cul-de-sac	It makes the intersection dangerous if cars can come out of Reynolds ave onto Greers and be straight into an intersection. Traffic light signals can be easily missed and cyclists injured. Cul de sac is safer and has minimal impact on residents.	Matthew Vannoort
11795	Yes	More trees in the area - and less congestion in that general area	live nearby; frequent Northlink/ Northlands Mall		Option 2: Reynolds Ave changed to a Cul-de-sac	Traffic lights biggest difference but also need to have controls on exits from north link with changes in lights hopefully breaks in traffic will allow clearing. The roundabout near the library further down Langdons road and into Northlands is also a nightmare with the traffic - plus of course Papanui road along Northlands	Tracey Wilson
11797	Yes	It's a terrible intersection so anything is better than what's currently there	frequent Northlink/ Northlands Mall	Cul de sac	Option 2: Reynolds Ave changed to a Cul-de-sac	No additional comments	Lisa Davis
11800	Yes	That intersection has been long overdue for traffic lights for years	commute through here; frequent Northlink/ Northlands Mall	That intersection should've been upgraded years ago & I believe should have 3 turn arrows	Option 2: Reynolds Ave changed to a Cul-de-sac	I'll go with option 2 because it looks the most practical	Rohan van Soest
11801	Somewhat	I think the requiremnts are good as it reduces the speed at which cars come out of reymonlds avenue in option 1 and in both options especially it gives deidcated bikes lanes to cycilaists making it vastly safer and easier for cyalists to commute and travel	frequent Northlink/ Northlands Mall		Option 2: Reynolds Ave changed to a Cul-de-sac	I believe that Option 2 is a significantly better choice for several reasons. Firstly, it offers a more attractive proposition for alternative modes of transportation, especially cycling. Option 1, in contrast, appears likely to perpetuate heavy car usage in the area. While Option 1 may enhance road safety, I'm convinced that Option 2's design is more conducive to the safety of not only car and other vehicle users but also pedestrians and cyclists. In addition to safety improvements, Option 2 also eliminates the concern of cars exiting from Reynolds Avenue, which would enhance the overall intersection safety. However, I must acknowledge that it may not necessarily reduce the volume of cars passing through the area. Nevertheless, this	Zak Morrison

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Improved safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
						<p>presents an excellent opportunity to reduce car dependency in this vicinity.</p> <p>In summary, Option 2 not only enhances the appeal of walking and cycling but also addresses safety concerns and aligns with a broader goal of reducing car dependence in the area. I strongly support this choice for the intersection proposal.</p>	
11802	Yes	It's a busy intersection, which needs more coordination at busy times	live nearby; commute through here; frequent Northlink/ Northlands Mall		Option 2: Reynolds Ave changed to a Cul-de-sac	I hope the lights are synchronised with the Greers Rd/Harewood lights, so that traffic moving along Greers Rd moves smoothly. At present, there is already significant queues building up for vehicles heading northwards, and lights at Langdons Rd could make this worse.	Rob Orange
11807	Yes	Turning right is a nightmare, traffic backing up leads to snap decisions	live nearby; commute through here; frequent Northlink/ Northlands Mall	A roundabout would ease and make flow more efficient from all angles especially during rush hour where cars will block the road with traffic lights. Bikes can cruise through with minimal safety concerns.	Option 2: Reynolds Ave changed to a Cul-de-sac	Bleeding traffic in/out of Reynolds is too close to the lights and will lead to blocking intersections/bike lanes.	Matthew Hartstonge
11809	Yes	Increased traffic control and less likely hood of cars speeding through side streets	live nearby		Option 2: Reynolds Ave changed to a Cul-de-sac	Traffic lights directly outside north link centre to improve traffic flow and enable pedestrians to safely cross.	Craig Ashby
11810	Yes	Turning right is hard and people take risks.	work nearby; commute through here; frequent Northlink/ Northlands Mall	Currently if we visit Northlink it's to awkward to turn right into Greers when going back home so we go back via Papanui Rd which is already congested. Getting more easily back on to Greers will allow better flow to the motorway.	Option 2: Reynolds Ave changed to a Cul-de-sac	Cars turn left out of Reynolds then right into Langdons and often there is not enough room. If there is lights here it's better to remove that option.	Nick Lynn
11816	Somewhat	It will definitely make it safer for those entering and exiting Langdons Road. It may however cause issues with build-up between this and the Harewood Rd lights if not managed correctly. The lights should be synced.	frequent Northlink/ Northlands Mall		Option 2: Reynolds Ave changed to a Cul-de-sac	Greers Road is far too congested at peak times for vehicles to safely enter/exit right before a set of traffic lights. People don't know how to leave space and/or let people in efficiently so keeping the road open, even with just left in/left out access, would contribute to congestion also.	Kate Ferguson
11820	Yes	This will make it easier for pedestrians to cross Greers and Langdons Road and make it safer to turn right out of Langdons onto Greers	live nearby		Option 2: Reynolds Ave changed to a Cul-de-sac	We live at the Greers Road end of Reynolds Avenue. We would very much prefer the cul de sac option as even putting lights in and making Reynolds Ave left in left out, there will be a massive back up of traffic on Greers going straight ahead when the lights are red and this will make it difficult to leave the street. It will mean having to go a longer way around, however, currently it is extremely difficult to turn right into Reynolds after coming out of Langdons Road, so the majority of the time I go the longer way anyway. And pretty much impossible to turn right onto Greers from Reynolds Ave at any	Vicki Smith

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Improved safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
						point of the day. I believe loosing parks on Reynolds Avenue would not be a major issue.	
11823	Yes	It is a dangerous intersection trying to turn right out of Langdons	commute through here; frequent Northlink/ Northlands Mall		Option 2: Reynolds Ave changed to a Cul-de-sac	Terrible intersection. Traffic lights would greatly improve but may still cause issues with the Greers / Harewood intersection being so close	Kim Roebuck
11829	Yes	Giving cyclists a place to be, and having more controlled traffic with the lights	other		Option 2: Reynolds Ave changed to a Cul-de-sac	Glad to see some space for cycleways. Let's ensure they are separated by more than a painted line. As we know, paint is not protection.	Danny Rood
11832	Yes	Hard to turn on this intersection, often had to take "risk" to get out	live nearby	About 500m away, Northfield Rd	Option 2: Reynolds Ave changed to a Cul-de-sac	I like both Option, but I guess the cul-de-sac will be safer, though probably less practical for people living on Reynolds Av.	Julien Maries
11833	Yes	Too many car accidents on this corner, safer for pedestrians with controlled lights.	live nearby		Option 2: Reynolds Ave changed to a Cul-de-sac	I could live with option 1 but prefer option 2, I rarely make a right hand turn out of Reynolds Avenu and usually go along to Highsted Road most of the time. It would make my house one from the very end of the new cul-de-sac.	Edward Raymond McDonnell
11834	Yes	Putting lights in will control the traffic, controlling when people can turn and where from, also will aid the safety of kids crossing the road from the school	commute through here; frequent Northlink/ Northlands Mall		Option 2: Reynolds Ave changed to a Cul-de-sac	I think making Reyonlds Avenue into a cul de sac would stop move traffic entering Greers road and people using it as a 'cut through road', will stop people leaving Langdons and quickly and unsafely crossing into Reynolds ave and vice versa- have seen near misses here from people trying to enter Reynolds Avenue quickly and unsafely. Also see people blocking the road by not going into the central median trying to enter Reynolds Avenue. It would also reduce congestion. Lights, assuming you can right turn out of Langdons, would reduce the build up of traffic along Langdons road with people trying to right hand turn and not being able to due to constant oncoming traffic. I also think it would as a result calm drivers in this area down- I have noticed people get frustrated trying to turn right here which leads to people taking risks.	Emma O'Carroll
11836	Yes	Will keep everyone moving at set times instead of people making risky decisions	live nearby; frequent Northlink/ Northlands Mall; commute through here		Option 2: Reynolds Ave changed to a Cul-de-sac	I worry about school kids crossing so lights would help keep them safer crossing while all cars are on a red light	Diane Brenchley
11837	Yes	The elevated intersection control will reduce driver frustration which will lower risk. I am a cyclist and I avoid this intersection because drivers often take risks to	commute through here	Sawyers Arms/Northcote & Greers intersection also requires improved safety improvements.	Option 2: Reynolds Ave changed to a Cul-de-sac	I have chosen the cul-de-sac option as I consider that it more significantly simplifies the complexity of the intersection by completely removing Reynolds. As a cyclist the alternative is too complicated and drivers might be encouraged to either "sneak in" or be "let in" and overlook the cyclists travelling at speed in the cycle lane.	Nick Tyler

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Improved safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
		slip into a gap and don't see the cyclists until it is too late.					
11838	Yes	This is a very busy and dangerous intersection and I think this is a fantastic idea.	work nearby; frequent Northlink/ Northlands Mall; commute through here	Regularly used this intersection for the last 7 years	Option 2: Reynolds Ave changed to a Cul-de-sac	I like the plan. I think this will greatly improve safety especially being close to a school. I don't have any other suggestions.	Alyssa McGaughey
11847	Yes	Less traffic trying to navigate around turning cars trucks and bikes.	commute through here; frequent Northlink/ Northlands Mall	Children attending nearby Bishopdale School require a better way to cross over any of these streets identified in the plan.	Option 2: Reynolds Ave changed to a Cul-de-sac	A cul de sac will minimise traffic turning in or out of a current situation	Bev Mitchell
11848	Yes	Too busy. Dangerous for driver and walkers	live nearby	I live off langdons on primrose street. I have never once in the 10 years of living here turned right on to greers road from langdons because of how crazy busy it is.	Option 2: Reynolds Ave changed to a Cul-de-sac	Lights lights lights! Safer for the kids to cross over langdons road	Sarah austin
11851	Yes	Dangerous intersections	live nearby; commute through here; frequent Northlink/ Northlands Mall		Option 2: Reynolds Ave changed to a Cul-de-sac	Traffic lights	Jane Howard
11852	Yes	Help cars turning right into or out of langdons. Will also be good for children biking to papanui high school.	live nearby	I live down Harewood road and frequently visit the shopping centre on Langdons road.	Option 2: Reynolds Ave changed to a Cul-de-sac	Reynolds ave is too close to the traffic light intersection. Best to make it a cul-de-sac.	Stephan Lloyd
11855	Yes	It's currently very dangerous and needs improving. The cul de sac is the best option.	live nearby; commute through here; frequent Northlink/ Northlands Mall		Option 2: Reynolds Ave changed to a Cul-de-sac	Great to see something done about this. Now just need a set of lights at the shopping centre itself.	Victoria Berryman
11858	Somewhat	I think this will. It is a big improvement. I do think that bikes could be more prioritised. I think there needs to be bike turning lanes with lights like on the intersection of Creyke and Clyde road. I hope shared parthway signs to pedestrian hight. 2m	commute through here; frequent Northlink/ Northlands Mall	I think this will. It is a big improvement. I do think that bikes could be more prioritised. I think there needs to be bike turning lanes with lights like on the intersection of Creyke and Clyde road. I think that the shared parthway signs need to pedestrian hight around 2m. As I fine that know one looks up at the current ones that are like 3 plus metres and they always seem to swist and move out of place like the stupid bus lane signs. I also think that with the bikes going on the footpath to go around the corner just to get put back onto the road doesn't really make to much sense either.	Option 2: Reynolds Ave changed to a Cul-de-sac	Option two is the best no one knows how to merge.	Thomas Blain
11867	Yes	Anything is better than what is there now	live nearby; frequent Northlink/ Northlands Mall	Turning right on to Greers is so dangerous. If you want to turn left you can't because people turning right block the road.	Option 2: Reynolds Ave changed to a Cul-de-sac	Turning right on to Greers is so dangerous. If you want to turn left you can't because people turning right block the road.	Simon Gulliver

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Improved safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
11877	Somewhat	More opportunities for pedestrian and bicycle users to have spaces to cross that aren't competing with motor vehicles	frequent Northlink/ Northlands Mall		Option 2: Reynolds Ave changed to a Cul-de-sac	This part isn't really my business, as I don't live or work near here.	Teresa Allpress
11881	Yes	makes it esier to right hand turn from langdons road.	commute through here		Option 2: Reynolds Ave changed to a Cul-de-sac	is there going to be a right hand arrow for traffic turning off greers road into langdons, other wise this is just going to cause a lot of red light running and long lines for people going that way.	Shallay Williams
11884	Yes	there are too many traffic during rush hours. Often driver are taking risky moves when they have waited for too long.	live nearby; commute through here; frequent Northlink/ Northlands Mall; work nearby		Option 2: Reynolds Ave changed to a Cul-de-sac	Option 2 seems to be a safer choice to reduce the traffic and improve the safety of the cyclist when turning to Landons road from Greers Road.	Tianwen Jiang
11957	Yes	Traffic lights is the main reason	frequent Northlink/ Northlands Mall		Option 2: Reynolds Ave changed to a Cul-de-sac	Either option is a huge improvement, well thought out	Jaryd Kelly
11963	Yes	People are less likely to take risky gaps of lights for each direction are implemented	live nearby; frequent Northlink/ Northlands Mall		Option 2: Reynolds Ave changed to a Cul-de-sac	Introducing the left-in and left-out does improve access to Reynolds Ave for residents. However, I think it also increases the chance of drivers missing the light colour change when turning left out of this street while checking for traffic to the right, with greater potential for crashes. Also, at high volume traffic times, this will only allow one car in, assuming that they are let in by another car, at each change in lights. This is why I prefer the option of turning Reynolds Ave into a cul de sac.	Laura Dickson
11969	No	With the set of lights so close on Harewood Road this will only mean the congestion which is bad enough will be more leading to drivers raking more risks running orange/red lights	live nearby; commute through here; frequent Northlink/ Northlands Mall		Option 2: Reynolds Ave changed to a Cul-de-sac	Leave things as they are! You are going to disrupt the flow for traffic dir tge minority that are turning! I've never seen an issue on this intersection nor any accidents that warrant the change	Deb Merito
11991	Yes	Traffic lights will prevent poor decision making on giveaway signs	live nearby; frequent Northlink/ Northlands Mall	Turning Greer's road onto Langdons should have turning arrows on the lights for the busy periods	Option 2: Reynolds Ave changed to a Cul-de-sac	Turning Greer's road onto Langdons should have turning arrows on the lights for the busy periods	Rebecca Hambrook
12042	Yes	The intersection is dangerous at the best of times in its current state.	live nearby		Option 2: Reynolds Ave changed to a Cul-de-sac	Turning Reynolds Ave into a cul-de-sac will not only decrease the amount of accidents and near misses at the Greers/Langdons intersection, it will also decrease traffic around houses at that end of the street, and encourage	Georgia Dickson

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Improved safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
						people to walk/bike more when venturing to Northlink/Northlands. A win-win!	
12074	Yes	Due to the traffic increase on Langdons rd, something needs to be done	live nearby		Option 2: Reynolds Ave changed to a Cul-de-sac	This would be the safest option	Dev
12097	Yes	Needs lights to control flow of traffic.	live nearby		Option 2: Reynolds Ave changed to a Cul-de-sac	Option 1 looks to be too close to the set of lights. Could cause issues trying to enter/exit.	Abigail Barclay
12107	Yes	It's necessary due to the volume of traffic	live nearby; frequent Northlink/ Northlands Mall		Option 2: Reynolds Ave changed to a Cul-de-sac	Traffic lights with dedicated right turn green light from Greers Rd into Langdons Rd	Marion Albuquerque
12113	Yes	It will allow for safer flow of all types of traffic	commute through here		Option 2: Reynolds Ave changed to a Cul-de-sac	No comment	Peter Norris
12128	Yes	The lights will assist those who need to turn right out of Langdons Road onto Greers Road.	live nearby; frequent Northlink/ Northlands Mall		Option 2: Reynolds Ave changed to a Cul-de-sac	Traffic is sometimes slowed by those turning into Reynolds Avenue. Removing this option should make it safer.	Megan Begg
12144	Yes	Difficult to get out of Reynolds Ave and crossing Greers road by foot	live nearby; commute through here; frequent Northlink/ Northlands Mall	Prefer option 2	Option 2: Reynolds Ave changed to a Cul-de-sac	Putting in lights	David Macdonald
12178	Yes	Controlled movement of traffic rather than people taking risks. Also poor visibility currently	commute through here; live nearby; frequent Northlink/ Northlands Mall		Option 2: Reynolds Ave changed to a Cul-de-sac	Good idea but light phasing with Harewood road needs to be considered	Brett Morrison
12285	Yes	Greers Rd & Langdons Rd get very congested which blocks up traffic, making right turns in and out of Reynolds Ave very dangerous. This is exacerbated by people turning left out of Langdons Rd not stopping at the stop sign.	live nearby	We live on Reynolds Ave, close to Greers Rd. Not having the right turn option out of Reynolds Ave will be an inconvenience for heading south however it is already almost impossible to do that now anyway. We suffer from speeding rat running traffic despite having speed bumps and the left in, left out option would not prevent rat running vehicles. The cul de sac would make the street quieter and safer.	Option 2: Reynolds Ave changed to a Cul-de-sac	A cul de sac will make it much safer getting across the road for school children and cyclists. If the street was made into a cul de sac then we would like to see the removal of the speed bumps as they will no longer be necessary and don't slow down many vehicles anyway. On the cul de sac there are four trees showing, it would be aesthetically pleasing to put six trees in.	Michael Tottman
12309	Yes	It will lower speeds, better direct vehicle	live nearby; work nearby; frequent		Option 2: Reynolds Ave	N/A	Daniel Milosavljevic

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Improved safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
		movement, and encourage vehicular use of main thoroughfares, not suburban backstreets	Northlink/ Northlands Mall; commute through here		changed to a Cul-de-sac		
12312	Yes	It provides some level of safety to pedestrians and cyclists and will give right turning traffic the chance to get through without needing to wait for gaps in traffic.	frequent Northlink/ Northlands Mall		Option 2: Reynolds Ave changed to a Cul-de-sac	<p>I prefer option 2: Reynolds Ave changed to cul-de-sac because it provides a pedestrian crossing leg on the south side of the intersection which option 1 does not and because it provides a safer overall intersection for pedestrians, cyclists and vehicles. If the left-in/left-out option is chosen instead, I think everything should be done to make room for the missing pedestrian crossing leg - we should NOT be building controlled intersections with missing ped legs in 2023.</p> <p>I appreciate the additions of cycle lanes, although they are only painted lines and look a bit narrow (are they best practice width?). I think the left turn lanes on Langdons and Greers should be marked as shared left turn/bike lane to make it clear than bikes can use it too rather than just the marked bike lane which ends up uncomfortably sandwiched between two vehicles lanes. This type of sandwich bike lane is really not ideal.</p> <p>I think the two large trees on the corner of Langdons and Greers should be kept and worked around since they are the ONLY street trees in the surrounding area. To remove the only street trees in the area is a really bad look for the "urban forest" council. The two trees are very close to the property edge so space should be found to widen the footpath a little bit to be able to keep them.</p> <p>Please plant more trees in the grass verges throughout the project area. You have four on the plans on Reynolds Ave, many more could be added on Greers Rd.</p> <p>Bainton and Hoani streets should have kerb build-outs at the intersections with Greers Rd to make them safer and easier to cross for pedestrians. They should possibly also have no right turns into them allowed from Greers Rd as this would cause conflicts with the right turning lane from Greers to Langdons.</p>	Jono de Wit
12314	Yes	By simplifying turning onto greers road and right turns onto langdons road. Pedestrians will be able to cross without dodging vehicles. The cyclelane on langdons road will	commute through here; frequent Northlink/ Northlands Mall		Option 2: Reynolds Ave changed to a Cul-de-sac	This option provides a safer intersection for all users (especially people walking and cycling) and simplifies vehicle flow through a busy intersection.	Mitchell Davies

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Improved safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
		have less drivers entering when avoiding right turning vehicles.					
12327	Yes	Makes the intersection more controlled and safer for all road uses. Very hard for pedestrians to cross here, hard to cyclist to navigate and hard for cars to use too.	commute through here		Option 2: Reynolds Ave changed to a Cul-de-sac	I prefer option 2 as it makes the cycle lanes safer	Holley Mckee
12328	Yes	The intersection is too dangerous at present without traffic lights	live nearby; frequent Northlink/ Northlands Mall	It is dangerous to make a right hand turn from Langdon road onto greers road at present. Traffic lights are needed. A right hand turning light is also needed at the intersection on Harewood road and greers road when turning onto greers road towards the bishopdale school.	Option 2: Reynolds Ave changed to a Cul-de-sac	About time traffic lights are installed.	Debbie Kutyn
12331	Yes	Safer option as cul-de-sacs actually decrease traffic flow and make it safer for pedestrians and people on bikes to use the public spaces.	commute through here		Option 2: Reynolds Ave changed to a Cul-de-sac	Cul-de-sacs make it much safer for people on foot, on bikes, in wheelchairs and in buggies to pass through the area. Especially as the intersection is near another major intersector, you avoid ugly situations where drivers are trying to turn left out of Reynolds and straight away want to turn right into Langdons, hence shifting lanes straight away coming out of the intersection with Reynolds. A cul-de-sac is a great traffic calming tool; much safer for ALL road users.	Anouk Minnaar
12335	Yes	Enables people to get their own crossing to cross their road (pedestrians and bikers)	frequent Northlink/ Northlands Mall		Option 2: Reynolds Ave changed to a Cul-de-sac	Cul-de-sac will make Reynolds Ave a much nicer place to be	Nick Reid
12336	Yes	I support the overall plan for the Greers and Langdons Road Intersection safety improvements. This is a difficult intersection to navigate on foot or by bike.	other	I have relatives living in the area.	Option 2: Reynolds Ave changed to a Cul-de-sac	Reynolds Road should be a good option to avoid the busy Greers / Harewood Road intersection and to avoid the big roundabout. However, rat-racing by car drivers between Langdons Road and Reynolds Avenue means its also getting very busy making it hard to use the refuge crossing in Greers Road . The other option is a 100m detour, walking to Bishopdale School to use the signalised crossing- a big deal if your very young, elderly or infirm. I believe Option 2 is the safest option for cyclists, pedestrians, and the many children using scooters to get to Bishopdale School. The cul-de-sac option allows pedestrians and less confident cyclists to walk across the intersection to Reynolds Ave using a direct route. It also has a safe in and out option into Reynolds Road. The left-out option from Reynolds Road is dangerous as vehicles will push out into the cycle lane and speed to get in front of traffic. While I don't agrees with	Meg Christie

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Improved safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
						shared paths, I would like to see infrastructure that gives people on bikes and scooters clear and easy access to the shared path with green paint before and perhaps an arrow so it's easy to see where to leave the road- easier for those who don't know the area they might miss the turn on to the shared pathway. I support the new traffic lights with signalised cyclist and pedestrian crossings, the cycle lanes on all approaches and the shared paths for less confident cyclists (others may ride on the road).	
12337	Yes	The addition of signals should reduce the level of risking taking by all users, by reducing frustration. Improved perception of safety for most users, especially pedestrians, scooters and those on a bike.	other	Occasionally our weekly bike group needs to ride along this section of Greers Road due to not being able to use Harewood Road to access Roto Kohatu Lakes and the Harewood Road roundabout.	Option 2: Reynolds Ave changed to a Cul-de-sac	Reduce potential for conflict between vehicles and pedestrians and cycles, including children scootering.	Robert Fleming
12339	Somewhat	Yes but only if the culdesac option is used, I don't think that allowing left turn in or left turn in and out is safe.	other	Cyclist who bikes around the city. Bike is my car replacement. I don't frequent this intersection daily, however I cycle all around the city and I want to see every project in the city consider biking and provide the safest option for cyclists.	Option 2: Reynolds Ave changed to a Cul-de-sac	<p>Safer for cyclists and pedestrians and keeps the pedestrian crossing which I think is vital to encourage more walking and biking. This is especially important to provide a safe convenient route for school kids to cross.</p> <p>I think that widening the curb cuts for the cycle lane on to the footpath and also clearly marking it as when cycling in places I don't frequent often I usually miss this turn offs.</p> <p>Also thinking into the future it would be nice for the cul-de-sac to become a nice shaded park area so some seating would be a nice addition.</p> <p>Thinking also of emergency access which might be a concern I don't think the design should be compromised to address this but instead worked around. There are ways to allow for emergency access while still preventing general motor traffic such as retractable bollards (probably out of scope) or simply making the curbs mountable so emergency vehicles can drive through (slowly and carefully)</p>	George Laxton
12340	Yes	The volume of traffic has grown to the point this intersection is unsafe, and at times impossible, for cyclists and pedestrians to cross. Lights will make a	commute through here	I have regularly biked in this area for decades for shopping and recreation, and to visit my sister who lives close by. Langdons Road used to be relatively quiet and it was a nice cut through via Reynolds Ave from Papanui to get to my sister's place or to Bishopdale Mall on my way home. Now it is almost impossible to get across Greers Road at times, either walking or cycling. Vehicles using Reynolds Road and Langdons to rat-race has made the corner particularly unsafe as they speed across small gaps in the traffic. It is great to see something being done about this. I strongly support the cul-de-sac option as it is the	Option 2: Reynolds Ave changed to a Cul-de-sac	Option 2 is by far the safest option for cyclists and pedestrians.	Anne Scott

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Improved safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
		huge difference to safety.		safest option for the most vulnerable users. I also think the intersection should have a pedestrian crossing option at the lights on the south side as well as the north. This upgrade will make a huge difference to safety at the intersection.			
12342	Yes	This will make it easier and safer to get across the road	commute through here	I worked for many years at Papanui and frequently cycled through here	Option 2: Reynolds Ave changed to a Cul-de-sac	Making Reynolds Road a cul-de-sac creates a much safer route through to Bishopdale Mall and then home for me. Went I was regularly biking through here I would see many children walking and on scooters going to Bishopdale School and older children heading to Papanui High in the mornings and afternoons.	Jill Scott
12343	Yes	It will make it safer for turning traffic. It will make it safer for people cycling or for people crossing the road (be it walking, or using a wheelchair, mobility scooter, or similar transports).	live nearby; commute through here; frequent Northlink/ Northlands Mall; other	I also travel this route when biking to sport or shops.	Option 2: Reynolds Ave changed to a Cul-de-sac	<p>Option 2 is a very clear preferred option for the following reasons:</p> <ul style="list-style-type: none">* It provides a pedestrian crossing point on the south side of the intersection. This better caters for pedestrians and anyone cycling west on Langdons Road and wanting to continue on Reynolds Avenue.* Making Reynolds Avenue a Cul-de-sac will quieten traffic on this road, making it safer for residents as well as improving safety for cycling.* Making Reynolds Avenue a Cul-de-sac makes it safer for pedestrians on the footpath as it is one less intersection to contend with.* Reynolds Avenue is far too close to the Langdons Road intersection, if it was opened up to Greers Road as in option 1, it would make it too dangerous. We would see drivers wanting to exit Reynalds Avenue to get to the turning lane. To do this, drivers would need to avoid any traffic in the straight through lane and avoid anyone that may have stopped for the lights. In doing this, drivers are very likely to miss a person biking in the cycle lane.* If Reynolds Avenue was opened up to Greers Road as in option 1, we would see drivers waiting in the cycle lane when exiting Reynolds Avenue and traffic is stopped for the red light.* If Reynolds Avenue was opened up to Greers Road as in option 1, when drivers try to get into the turning lane for Langdons Road, it is very likely they could be on an angle to the lane and potentially block the straight through lane. Maybe straight through traffic would use the cycle lane to get past; this would create risk for people biking.* If Reynolds Avenue was opened up to Greers Road as in option 1, we could see drivers leaving a gap for drivers exiting from Reynolds Avenue. That driver's vehicle and any vehicle behind them would be obscuring any traffic in the right turning lane on to Langdons Road. Also, when drivers leave a gap, often the other taking advantage of the gap forgets to look for cyclists. <p>For Option 1, could we please see a model of how vehicles</p>	Allan Taunt

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Improved safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
						would be positioned in the lane when exiting Reynolds Avenue and turning right on to Langdons Road. I feel the lane position for motor vehicles would be poor in many cases. In the attached image you can see the risks with the current intersection. Cycling on the footpath because it is too unsafe on the road. Obscured visibility (and the driver on my right is just about to obscure my visibility). A child crossing Langdons Road. There is also another cyclist obscured behind the vehicle on Langdons Road. Full submission attached.	
11757	Somewhat	It will move the increased traffic to other areas so it will make it safer at that specific intersection but less safe where there will be more traffic	live nearby; frequent Northlink/ Northlands Mall; work nearby; commute through here	I live near the middle of reynolds ave and already avoid this intersection when traveling to northlink or northlands. Both of the suggested changes will make my neighbors and I have to drive around the long way on the return journey, with more right turns as well	Other: Tell us how to improve this intersection	leave it as is	Sharn Davies
11818	Yes	We live not far away from this busy intersection, We think lights are very important on this intersection for the safety reason. Can you please put the lights up as soon as you can, Thanks	live nearby	Too many vehicles, Lights are very important on this intersection. Since the Northlink mall traffic has increased on this intersection. We think its important to have lights up and running as soon as you can for the safety reasons. Thanks	Other: Tell us how to improve this intersection	Please put the lights on as soon as you can, It will help the flow of traffic.	Amandeep Singh
11824	No	People use Reynolds ave as a vital thoroughfare to Highstead road and changes to the greets road end of reynolds ave will result in more dangerous driving, either illegal turning into greers road or speeding down reynolds ave to make up the lost time.	live nearby	I would be against these proposed changes.	Other: Tell us how to improve this intersection	I would propose a 4 way intersection with lights also on Reynolds ave with turning out of Reynolds ave available both left and right. A 4 way offset controlled intersection would be the best way to go. The turning right and left from the Greer road end of Reynolds ave is vital for travelling north and south. Otherwise resident will be forced to increase travel, which would increase emissions and fuel consumption.	David Hammond
11850	Yes	It is a very busy intersection and difficult to turn right	live nearby; frequent Northlink/ Northlands Mall;		Other: Tell us how to	I do not live in Reynolds Ave and consider those who do should have their opinions considered and given most weighting.	Christine Margaret

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Improved safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
		at most times. Frustrated users take chances and the whole corner backs up and comes to a standstill	commute through here		improve this intersection		Grace McPhail
11869	Yes	The Langdons Road Intersection has been dangerous for decades. Even as a pupil at Papanui High School back in the 1980's it was a hazardous site. It should have been upgraded with traffic lights at the same time as the other end of Landons Road was.	other; work nearby	I spent the first 30 years of my life living in Papanui and now commute to and from work along Greers Road at times.	Other: Tell us how to improve this intersection	<p>Why do you make the Reynolds Ave / Langdons Road one large intersection that is controlled by traffic lights? Placing traffic lights on Greers Road, South of Reynolds Ave and North of Langdons Road, would allow residents and commuters to still be safely able to access Reynolds Ave and Langdons Road, while still providing safe through traffic flows on Greers Road.</p> <p>Blocking Reynolds Ave seems rather a backward step in terms of taking the community with the Council, and would disadvantage many residents who use that exit onto Greers Road. It hardly seems fair and balanced to block or limit access to Reynolds Ave when you aren't doing the same to Langdons Road.</p> <p>Isn't the Council supposed to be Actively balance the needs of today's residents with the needs of future generations, with the aim of leaving no one behind? And isn't the Council supposed to be creating an inclusive and equitable city which puts people at the centre of developing our city and district, prioritising wellbeing, ACCESSIBILITY and CONNECTION? Cutting peoples transport connections, reduces accessibility to not only their homes, but where they work and where they shop. It also means that increased lengths of kilometers travelled to be able to navigate alternative routes, which pumps more harmful pollutants into the atmosphere. These factors are all counterintuitive to the Councils Strategic Framework.</p> <p>I can see merit in closing down Reynolds Ave into a cul-de-sac makes the job of Council Staff a lot more straight forward, but it doesn't factor in the cost to local residents and property owners well being.</p> <p>Public trust in the Council is at an all time low, especially after the way you treated Bromley residents, so don't go and screw over the residents in Bishopdale too all due to poor planning and not thinking more creatively.</p> <p>And why aren't there very many trees being added to the streetscape in the plan? Didn't Christchurch declare a Climate and Ecological Emergency? Surly more can be done in terms of tree planting than what the plans are going to deliver!</p>	Greg Partridge

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Improved safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
11872	Somewhat	It will hold up traffic even more due to the poor traffic lights 100 metres up the road, the flow of traffic through that at peak times is already poor and doesn't need to made worse. It may lead to more people running red lights	live nearby; commute through here	The already poor intersection 100 metres up the road on hardwood road always gets backed up ridiculously due to poor traffic flow from the cycle of the lights. This new intersection will make things worse for local residents and cause more accidents in the future as people will be more inclined to cross the intersection when there is no room on the opposite side due to congestion. The intersection doesn't need any work done to it.	Other: Tell us how to improve this intersection	With the current traffic flow there is no good way to improve the intersection	Dylan Dempsey
11873	No	Traffic lights bunch the traffic and cause delays and are bad for cyclists. A simple roundabout would be a much more elegant solution.	frequent Northlink/ Northlands Mall; live nearby	Why spend so much time and effort on an expensive traffic light installation and major redesign of the junction when all that is required is a small roundabout to allow people turning right to quickly gain priority rather than having to wait for a gap in the traffic from both directions. Roundabouts also naturally reduce speeds and make the junction safe. All that is needed is to not pull the usual stunt of stopping the cycle lane and narrowing the lane a few meters before the roundabout.	Other: Tell us how to improve this intersection	See above	Peter Brown
12045	No	I PICK NEITHER OPTION Congestion out weights benefit. I don't think we need any change especially with the ccc being so in dept & wasting millions on the even more ridiculous harewood road project .	live nearby; commute through here	CAN I MAKE IT CLEAR I CHOOSE NEITHER OPTION Additional road marking in the first instance in this area would be a great improvement to trial first . I say this A there's loads of other things we should be spending money on. further delays in my commute to work/life. This in addition to the harewood road delays are going to make my daily commute so long and monotonous that I'll seriously consider relocating as so I can make my work commute timely and to meet Child care requirements. I'll also refuse to attend the mall & Langdons in strike , furthering the stress of loss of spending on businesses. This is sad after living in this area the last 40 years. Also a lot of wasted money to add to tax payers bills particularly the ccc deficit. People should be trusted to be safe in cars and allowing a good flow of traffic maybe driver education is a better resource . The delays at this site are going to be astronomical. To the opportunities below. Sadly I work in healthcare which is already stretched so can't make meetings In hours unfortunately and Frankly attending 1-1 meetings are an utter waste as you make up your mind and go against consensus or opinions anyway.	Other: Tell us how to improve this intersection	I'd choose neither option Better sign and mark the road to allow turning and reduced congestion. People need to be courteous on the roads. Teach that it works in other countries	Louise Kett
12079	No	I believe this intersection needs to be in ONLY for traffic moving from Harewood road	live nearby; commute through here; frequent Northlink/ Northlands Mall	Yes we need to improve this intersection but I believe the 2 options given are NOT the safest option.	Other: Tell us how to improve this intersection	Make Reynolds Ave a in only for traffic moving on Greers Road towards Langdons Road from Harewood Road.	Nat Clark

Submissions received on Greers and Langdons Road intersection upgrade, November 2023

ID	Improved safety	Comments	"In relation to intersection, I..."	Comments	Preferred option	Comments	Name - Organisation
		towards Langdons road on Greers road					
12116	Somewhat	Lights re definitely needed for right turns from Langdons AND Sawyers Arms onto Greers.	live nearby; commute through here; frequent Northlink/ Northlands Mall; other; work nearby	Lights are needed but if you block Reynolds Ave., then you MUST, MUST, MUST put right turning lights from Sawyers Arms Rd southbound onto Greers westbound.	Other: Tell us how to improve this intersection	Lights include Re Reynolds Ave.	Phil Day
12302	Other	For the near by Schools safety is great, but this is again silly for the roads.	live nearby	Since the decision of Harewood Road has passed to become single lanes for all those bikes that go up and down the road every day (they don't), your only going to congest the Northwest even more. I don't see how you will make traffic flow better after this Harewood road call. which was a 60 to 40 vote yet passed I got 40% in some exams wish you were there to overrule that. I appreciate and love my City I have for 40 years especially the North West. I fell after all these road calls it might be time to move on. I'm not even angry just over it.	Other: Tell us how to improve this intersection	I don't think it works, after Harewood Roads single lane, Passing.	Cameron Brent Tyler



Greers and Langdons Road Intersection Safety Improvements

Submission from Spokes Canterbury

Reference: <https://letstalk.ccc.govt.nz/greers-and-langdons-intersection-upgrade>

Tēnā koutou katoa

Thank you for the opportunity to comment on the proposed Woodham-Gloucester Intersection Safety Improvements.

Introduction

Spokes Canterbury (<http://www.spokes.org.nz/>) is a local cycling advocacy group with approximately 1,200 followers. Spokes is affiliated with the national Cycling Action Network (CAN – <https://can.org.nz/>). Spokes is dedicated to including cycling as an everyday form of transport in the greater Christchurch and Canterbury areas. Spokes has a long history of advocacy in this space including writing submissions, presenting to councils, and working collaboratively with others in the active transport space. We focus on the need for safe cycling for those aged 8 to 80.

Proposal

Spokes supports the overall plan for the Greers and Langdons Road Intersection safety improvements. This intersection has become a particularly difficult to navigate as a cyclist or pedestrian.

Cyclists often use Reynolds Road to avoid the Greers Road / Harewood Road intersection which has a high number of vehicles and avoid using Harewood Road while we wait for a safe cycleway. The normal route for less confident cyclists is Reynolds Road, the alley way to Bainton Street, Bainton to Highsted Road, crossing the road on foot, passed the petrol station to the refuge on Harewood Road and then to Bishopdale Mall which avoids the two-lane roundabout.

There is a significant problem at the moment with vehicles rat-racing between Langdons Road and Reynolds Avenue. The volume of traffic has become so heavy at times that the refuge crossing in Greers Road is basically unusable and you have to walk down to the Bishopdale School pedestrian lights.

Spokes:

- **Strongly supports Option 2** to cul-de-sac Reynolds Avenue. This is the safest option for cyclists, pedestrians, and the many children using scooters to get to Bishopdale School. The cul-de-sac option allows pedestrians and less confident cyclists to walk across the intersection to Reynolds Ave using a direct route. It also has a safe in and out option into Reynolds Road for those using active transport. The CCC figures have shown that most residents use the Highsted Road exit via Drysdale Street.
- The left-out option from Reynolds Road is dangerous as vehicles will push out into the cycle lane and speed to get in front of traffic. There is **very little** space for a driver to make a mistake.

- A less optimal option is left turn in to Reynolds Ave designed in a way that encourages a low-speed turn and with due consideration of how cyclists will get back onto the left-hand side of the road after crossing Greers Road. The visibility on the corner is not great. The pedestrian crossing on the south side should be retained if this option is taken.
- Please ensure that cyclists can go from Langdons Road, across Greers Road, and have clear and easy access to the shared footpath, with a smooth transition, especially for those on cargo bikes or trikes, to then go into Reynolds Ave.
- Please make these slip lanes wider and longer so it's easier to cycle up them and please mark the road with green paint before and perhaps an arrow so it's easy to see where to leave the road. This is especially important for the safety of those who don't know the area as they might miss the turn on to the shared pathway. Green paint also reminds drivers that these are cycle lanes and at the very least should be extended past Langdons Road.
- Supports the new traffic lights at this increasingly busy intersection allowing signalised cyclist and pedestrian crossings.
- Supports the cycle lanes on all approaches.
- Supports the shared paths for less confident cyclists.
- The camber on Langdons Road is quite steep which makes it difficult and much less safe to ride a cargo bike or accessibility trike.
- A solid median or flexi-poles should be considered at Reynolds Road to stop people cutting through.
- Please widen the footpath on both the corners of Langdons Road to slow the traffic down when they turn (narrow the space for cars). This plan removes the flexi-poles in the middle of Langdons Road which are currently forcing vehicles to slow down to a sensible speed after the original berm was destroyed. The intersection should be designed so cars to turn at less than 30km/h.
- Please consider a raised safety platform to reduce speeds.
- We note that Greers Road is reduced to 40km/h in the 10 year plan. Please also give priority to a 30km/h variable speed for the school.
- The cul-de-sac will be a nice small tiny park so some seating would be nice, especially as the trees grow to maturity it will provide shade.
- People often rat-run Reynolds Ave to Langdons Road to avoid the right turn onto Greers Road from Sawyers Arms Road, particularly parents coming from Casebrook Intermediate via Veitches Road and who want to go to Papanui High on Langdons Road. The Sawyers Arms Road and Greers Road intersection also needs lights particularly as the city is expanding rapidly in this direction with a significant number of new housing estates going in, increasing the volume of traffic beyond that expected in the original design.
- Please consider traffic calming on Bainton Street as it is likely that the rat racers will start using this street as an alternative.

I would like the opportunity to present to the Community Board on this submission and I am happy to discuss or clarify any issues that arise.

Anne Scott
Submissions Co-ordinator
Spokes Canterbury
submissions@spokes.org.nz

Tell us what you think

Do you think this intersection upgrade will improve safety?

Yes

Tell us why

This intersection is really busy now and very unsafe for people cycling, scooting and walking. Traffic signals are required to make sure people walking, scooting, and cycling can safely cross Greers Road, and to enable vehicles to safely turn right from Greers onto Langdons (possible, but patience is required currently) and to safely turn right from Langdons onto Greers (almost impossible currently, even if you're patient). Traffic signals will reduce the number of crashes and near misses, and hopefully prevent some of the rat-running currently being done due to the inability to turn right out of Langdons onto Greers.

In relation to this intersection do you

Frequent Northlink/Northlands Mall

Live Nearby

Other

Comment here

I cycle between my home (just off Gardiners Rd) and Northlink/Northlands/Papanui Library/Graham Condon/Mitre10/other adjacent businesses via Reynolds Ave and Langdons Rd, and Bainton St on the return journey (due to too many queued vehicles on Greers waiting to turn right into Langdons). The Wheels to Wings cycleway needs to be built as soon as possible to make this journey safer for cyclists (while also providing safer access to Bishopdale Village Mall, Harewood Veterinary Hospital (yes, I take my cats on my cargo bike), and other places along Harewood Road). Safe connections need to be made to other local places, such as Bishopdale School and Papanui Preschool & Nursery, so I fully support cycle lanes and shared paths wherever they can be installed, especially if they connect to cycleways.

Which option for Reynolds Avenue do you prefer?

Other – left-in only to Reynolds Ave (option 4c in the webinar). This option provides better access for residents and emergency services (without adding additional traffic to Harewood Rd, Highsted Rd, Greers Road north of Reynolds Ave, Sawyers Arms Road, and Reynolds Ave) without compromising as much on safety compared to the left-in, left-out option. If I was to choose between options 1 (left-in, left-out) and 2 (cul-de-sac), I would choose option 2 as it's the safest option. I don't live in the lower part of Reynolds Ave, I just travel through there on my bicycle/cargo trike. I'd love to know what the residents want, and how we can reach a safe compromise for the greater good.

The webinar showed that option 4c (left-in only to Reynolds) included a pedestrian/cycle crossing across Greers Rd south of Langdons Rd at the intersection. This crossing is crucial for the safe passage of cyclists and pedestrians without inconveniencing them unfairly (and thus encouraging dangerous crossings of Langdons or Greers Rds).

When is Sawyers Arms/Greers/Northcote intersection getting traffic signals? This was pushed out due to other projects receiving funding from central government, but this intersection desperately needs attention as the population out here grows with all the new houses being built in Casebrook.

When is the Wheels to Wings cycleway and associated changes to the Bishopdale Roundabout being built? Locals like me have been waiting 10 years for this cycleway and we continue to risk our lives by cycling on the road in the meantime.

The flow-on effect from making this end of Reynolds Ave a cul-de-sac is large due to other nearby intersections not functioning well currently.

I am glad to hear (via the webinar) that traffic calming may be added to Bainton St, if needed, due to flow-on effects. Please set aside budget for this now, as it is highly likely to be needed.

This partial cul-de-sac treatment (option 4c) could allow for at least one tree to be planted in the intersection vicinity to visually narrow the space and encourage safer travelling speeds.

Will there be a solid median installed to prevent illegal right-turns into Reynolds Ave, e.g. Rutland St and Westminster St?

Please install a raised safety platform at Langdons/Greers Rd intersection to encourage slower travelling speeds. I note that the recent Safer Speed Plan consultation has Greers Road reducing to 40 km/h in the 10 year plan. I hope this can be done sooner, and a variable speed limit at school start/finish times for Bishopdale School (reduced further to 30 km/h) should also be installed as soon as possible. Please ensure the kerb renewals at the Langdons/Greers Intersection encourage slower speeds.

Will the kerbs and channels be replaced on Langdons Rd?

Will the road be completely rebuilt, or resealed? Currently, the camber on Langdons Rd is quite steep, which makes it difficult to ride a (cargo) trike.

Will the shared paths around the perimeter of the intersections be clearly marked, with multiple ramps on and off, i.e. not reliant on using driveways to transition between riding on the road and riding on the shared path? This is made more difficult with the deep dish channels on Langdons Road. Note that cargo bikes and trikes can be 1 metre wide and 2 metres long, so need a wider flatter space to change between riding on the road and riding on a shared path (which also needs to be wide enough to not endanger pedestrians). Please install centreline and "keep left" markings on the shared paths on each side of Langdons Road to prevent head-on collisions between users on these shared paths.

I cycle along Reynolds Ave and Langdons Rd to avoid using Harewood Rd or Sawyers Arms Rd, due to the lack of safe cycling infrastructure. I have tried to cycle along Bainton St and Hoani St, but crossing Greers Rd is near-on impossible due to the heavy traffic. Please make the cycle lanes as obvious as possible, i.e. more green paint all along cycle lanes, not just at the intersection (where drivers ignore cycle lanes and advanced stop boxes).

I fully support installing traffic signals at Langdons/Greers intersection and restricting access to/from Reynolds Ave to make Greers Road safer and flow well.

I fully support shared paths around the periphery of this intersection.

I fully support clearly marked cycle lanes on all approaches to this intersection (and hope they are connected up to the Wheel to Wings Papanui ki Waiwhetū cycleway, once built).

Here are some videos from a friend, just to show a cyclist's perspective while travelling along these roads in light traffic: https://www.youtube.com/playlist?list=PLlr42U_5l25rareHuEaVs7YEjdL6Ws1zG

Submission ID: 12254

Have your say

Greers and Langdons Road intersection upgrade

Tell us what you think by 31 | October | 2023

Christchurch
City Council 

Save time do it online letstalk.ccc.govt.nz

Do you think this intersection upgrade will improve safety?

☒ Yes ☐ No ☐ Somewhat ☐ Other

Tell us what upgrade option do you prefer & why?

I prefer Option 1: Reynolds Avenue
left in left out
If unable to access/depart from Reynolds Avenue
if it is blocked off
it would mean more congestion at Sangers Cross /
Greers Road intersection, which has no lights and
is dangerously busy already.

Would you like to speak to decision makers about your submission?

☐ Yes ☒ No

Christchurch
City Council 

Name*

Shayne Richard Gordon

If you are responding on behalf of a recognised organisation, please provide:

Organisations name

Your role

* required

Please fold with the Freepost portion on the outside, seal and return by 31 October 2023

Please note:

We require your contact details as part of your submission - it also means we can keep you updated throughout the project.

Your submission, name and address are given to decision-makers (Community Board) to help them make their decision.

Submissions, **with names only**, go online when the decision meeting agenda is available on our website.

If requested, submissions, names and contact details are made available to the public, as required by the Local Government Official Information and Meetings Act 1987. For the full Christchurch City Council Privacy Statement 2020 please go to www.ccc.govt.nz/the-council/how-the-council-works/privacy-statement/

If there are good reasons why your details and/or submission should be confidential, please contact our Engagement Manager on (03) 941 8999 or 0800 800 169

If including extra paper, please make sure the folded posted item is no more than 6mm thick.
Or send your submission in an envelope of any size to 'Freepost Authority No. 178'.

FREEPOST Authority No. 178



Attention: Irene MacArthur
Engagement Advisor
Christchurch City Council
PO Box 73016
Christchurch Mail Centre
Christchurch 8154

Christchurch
City Council



Sensitivity: General

Item 7

Attachment C

Greers Road/ Langdons Road Intersection

Scheme Assessment Report

16/11/2023

Sensitivity: General



Document completion

Action	Name	Signed	Date
Parts 1- 5			
Prepared by	Madison Riddall, Ben Dodgshun		05 September 2023
Reviewed by	Oliver Brown		05 September 2023
Project Manager			
Parts 6-7			
Prepared by	Irene MacArthur (Part 6), Ben Dodgshun (Part 7)		16 November 2023
Reviewed by	Oliver Brown (Part 7)		16 November 2023
Project Manager			

Revision History

Revision No.	Prepared By	Date	Description
1	Madison Riddall, Ben Dodgshun	05 September 2023	Draft, Parts 1-5
2	Ben Dodgshun, Irene MacArthur	16 November 2023	Parts 6 and 7 added

Sensitivity: General

EXECUTIVE SUMMARY

Background and Context

This project entails an upgrade of the existing intersection of Langdons Road and Greers Road from priority control to signalisation. This is to mitigate the adverse impact of the increased delay, safety concerns for pedestrians and cyclists, and overall intersection performance, that result from the development extension of the Northlink retail park. Crash data does not show an existing crash trend at this site.

The objectives of the project are:

1. To improve the Level of Service at the intersection of Langdons Road and Greers Road and mitigate the increased delay for turning movements resulting from the proposed development.
2. To improve the safety for pedestrian and cyclists from increased vehicle movements at and surrounding the intersection of Langdons Road and Greers Road.
3. To prevent rat-running trips on local roads following increased demand from the proposed development.
4. To optimise link capacity and performance on Greers Road.

An opportunity of extending the cycle lanes on Greers Road to Harewood Road to connect to the Wheels to Wings Major Cycle Route and fill a missing link in the local cycle network has been identified and included in the scheme.

The project features in the capital programme in the Level of Service Improvement category.

The existing intersection configuration consists of a left-right stagger of the Reynolds Avenue and Langdons Road priority intersections with Greers Road as presented in Figure 1. There is a short offset of 10-15 m between the two intersections.



Figure 1: Existing intersection configuration

Sensitivity: General

Option Assessment

Building on previous assessments, a range of options have been developed and assessed. For completeness, options previously ruled out, such as increasing local area traffic management and signalling both the Langdons Road and Reynolds Avenue intersections, were included in the assessment. Variants of the option involving signalling the intersection of Langdons Road and Greers Road only were developed in more detail to allow the benefits and impacts of these to be better understood. The difference between the variants was the treatment of the Reynolds Avenue intersection, which being in close proximity to Langdons Road, would impact the operation of the proposed traffic signals. The options assessed are listed below:

- Option 1 – Do nothing (no network changes).
- Option 2 – Do minimum (increase local area traffic management).
- Option 3 – Signalise both Langdons Road and Reynolds Avenue intersections.
- Option 4 – Signalise Langdons Road intersection only. This option includes variants as below:
 - Option 4a – retain full movements at Reynolds Avenue
 - Option 4b – left-in/left-out at Reynolds Avenue
 - Option 4c – left-in only at Reynolds Avenue
 - Option 4d – full closure/cul-de-sac at Reynolds Avenue

The figures below show the treatment of both intersections for options developed further. Retaining full movements at Reynolds Avenue (Option 4a) was not considered viable due to the crash risk associated with right turns through queued traffic and was not developed in any detail.



Figure 2: Option 4b configuration

Sensitivity: General

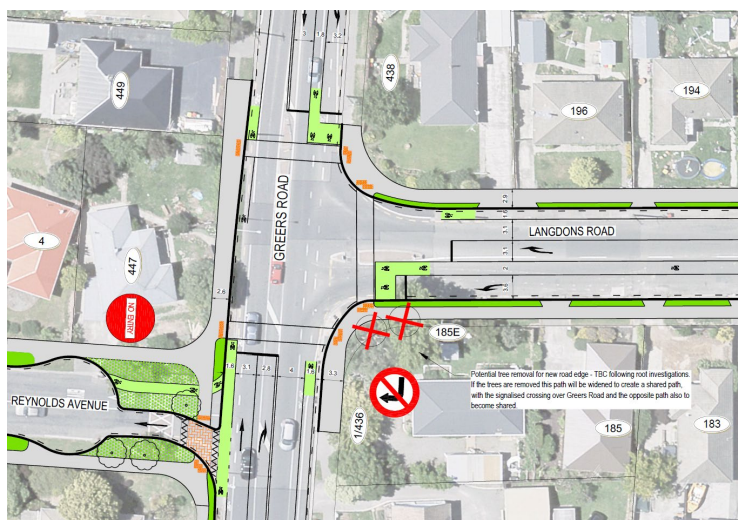


Figure 3: Option 4c configuration

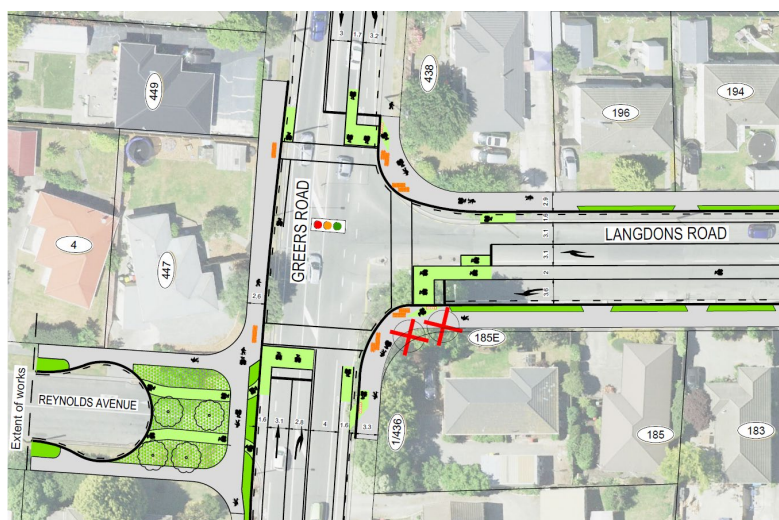


Figure 4: Option 4d configuration

Option 4c (left-in only at Reynolds Avenue) and Option 4d (cul-de-sac of Reynolds Avenue) performed the best against the project objectives. An advantage of these options is the provision of a pedestrian crosswalk over the Greers Road south approach, which is not possible with Option 4b due to the crash risk associated with a pedestrian crosswalk being located in such close proximity to a priority-controlled intersection. However, these options also have the greater impacts to access for residents in the area surrounding Reynolds Avenue. The SSA, considering the safety of all road users, rated Option 4d as the safest option, followed by Option 4c.

Based on the options assessment and the Safe System Assessment, progressing Option 4d is recommended. Option 4c is also considered to provide a good outcome and could be considered a fallback if Option 4d could not be implemented. However, due to concerns that both Options 4c and 4d may be unacceptable to residents, it has been agreed that Option 4b (left-in/left-out only at Reynolds Avenue) will be presented for community feedback alongside the preferred

Sensitivity: General

Option 4d. Whilst Option 4b has poorer outcomes against the project objectives, including in the areas of traffic impacts and safety and connectivity for active mode users, it still provides benefits over the existing scenario. To avoid seeking community feedback on multiple options with little differentiation between them, Option 4c will not be taken to consultation. However, as a combination of Options 4b and 4d, there is the potential for it to emerge as a preferred option following community feedback.

Preferred option overview

Whilst two options, 4b and 4d, are being progressed to community consultation, the majority of the design is consistent between the two options, with the difference being limited to the treatment of the Reynolds Avenue intersection, the signalised pedestrian and cycle crossing over the south approach of Greers Road, and the associated shared path connections around the intersection.

As the preferred option, Option 4d allows for the safest and most efficient operation of Greers Road by removing all interaction with traffic on Reynolds Avenue. It also provides the safest and best-connected option for people walking and cycling. It does, however, restrict all vehicle movements in and out of Reynolds Avenue from Greers Road. Although turning volumes are not high, this would result in re-routing for residents, including requiring right turns onto roads such as Highsted Road and Sawyers Arms Road from within the local area. Additional no stopping lines around these intersections is recommended but not included in the current scheme design.

Option 4b maintains left turns in and out of Reynolds Avenue from Greers Road. The operational efficiency of Greers Road would likely be impacted as northbound drivers wait on the green signal, allowing others to enter the stream of traffic from Reynolds Avenue. It would also likely be affected by drivers trying to make the short left-right movement into Langdons Road obstructing northbound traffic if not able to enter the right turn lane fully. There is also a crash risk associated with this if drivers turn through queued straight through traffic on Greers Road whilst the right turn phase is operating.

Right turns would present a much greater safety risk due to turns through queued traffic and would be difficult to undertake due to the replacement of the flush median with a right turn bay. Nevertheless, right turns are not physically prevented with Option 4b, and are likely to illegally occur to some degree.

Cost Estimate

The confirmed CPMS/SAP budget in the brief is \$2.0 M.

The draft cost estimate for the project is as follows:

Option 4B: \$2.37 M

Option 4D: \$2.36 M

This estimate is subject to review of the schedule rates against current market rates. It includes a 25% contingency and ancillary works, including power undergrounding, totalling \$0.48 M. This is an estimate, subject to an assessment and design being completed by Connetics.

The estimate allows for items such as mill and mix on the intersection approaches for skid resistance, relatively extensive amounts of shoulder construction associated with the road widening, and deep-lift asphalt through the intersection. This reflects a worst-case, but quite likely, scenario of the extents of pavement construction. Replacement of stormwater assets that

Sensitivity: General

will become in the roadway due to the road widening has been allowed for. The need for this will be confirmed as part of further investigations during detailed design; concrete capping of the existing pipes may be adequate.

Risks

The aspects of the scheme have been identified as the key risks:

- Traffic impacts of the new signalised intersection (particularly until such time as the Greers Road/Sawyers Arms Road/Northcote Road upgrade is completed.
- The banning of turning movements at the intersection of Reynolds Avenue with Greers Road.
- The removal of on-street parking on Greers Road and Langdons Road.
- Cost risks associated with utilities and pavement, which are typically not fully understood at scheme stage.

The installation of the traffic signals increases delay to through traffic on Greers Road, which previously had priority over Langdons Road traffic. Right turn delays are reduced, whilst the delay generally decreased for Langdons Road traffic, especially the right turn out.

With weekday traffic volumes in the order of 19,000 VPD, there is little spare capacity on Greers Road. The Greers Road/Sawyers Arms Road/Northcote Road intersection upgrade is expected to reduce traffic volumes on Greers Road, particularly in the southbound direction. However, this project is not programmed to be completed until after the Langdons Road/Greers Road signals are constructed. This will result in notably greater delays to Greers Road traffic in the interim period.

Next Steps

The next step for the project is to seek TSG and Community Board agreement on the options, followed by community consultation on the preferred option/s.

Sensitivity: General

TABLE OF CONTENTS

EXECUTIVE SUMMARY 3

 Background and Context..... 3

 Option Assessment 4

 Preferred option overview..... 6

 Cost Estimate 6

 Risks 7

 Next Steps 7

TABLE OF CONTENTS..... 8

1 INTRODUCTION & BACKGROUND..... 1

 1.1 Project Description..... 1

 1.2 The need for the project & work completed to date..... 2

 1.3 Project Budget..... 3

 1.4 Project Sponsor and Team 4

 1.5 Project Timeframes & Milestones 4

2 CONTEXT, ENVIRONMENT & EXISTING ISSUES 5

 2.1 Land Use Environment..... 5

 Land Use..... 5

 District Plan Zoning 5

 2.2 Transport environment..... 6

 Pedestrians..... 6

 Cycling 7

 Public Transport Facilities and Routes 11

 Road Network 13

 Geometry 17

 The intersection turning volumes 23

 Predicted Future Turning Volumes 24

 Current Midblock Traffic Flows..... 24

 Risk Mapping..... 29

 2.3 Crash History..... 31

 Greers Road including and to the north of the intersection with Langdons Road 32

 Langdons Road and Reynolds Avenue intersections and approaches to Greers Road, Greers Road south to Bainton Street..... 32

Sensitivity: General

Greens Road south of Bainton Street	33
2.4 Opportunities and constraints	33
2.5 One Network Framework (ONF)	34
3 OUTCOMES AND OBJECTIVES	35
3.1 Strategic Transport Context	35
Introduction	35
National Strategies.....	35
Regional Strategies.....	37
Local Strategies	38
3.2 Project Objectives	38
4 OPTION ASSESSMENT	39
Traffic modelling	39
Option Assessment Against Project Objectives	40
Option 1 – Do nothing.....	40
Option 2 – Increase local area traffic management	41
Option 3 – Signalise both the Langdons Road and Reynolds Avenue intersections.....	42
Option 4a – Signalise Langdons Road; retain full movements at Reynolds Avenue.....	43
Option 4b – left-in/left-out at Reynolds Avenue	45
Option 4c – left-in only at Reynolds Avenue.....	47
Option 4d – full closure/cul-de-sac at Reynolds Avenue	49
Summary of Safe System Assessment	51
Option assessment summary.....	52
5 PREFERRED OPTION	54
5.1 Introduction and Outcomes.....	54
5.2 Design Guidance and References	54
5.3 Key Features.....	55
Geometric Design.....	55
Construction.....	56
Landscaping and trees	56
Traffic signs and road markings	56
Effects on parking	56
Traffic Signal Phasing	57
Vehicular tracking	58
Sight distance/visibility splays.....	58
5.4 Transport Impacts	58

Sensitivity: General

Traffic Modelling	58
5.5 Meeting the objectives and alignment with wider strategy	58
Alignment with objectives	58
5.6 Asset Management Considerations	59
Stormwater	59
Wastewater	63
Water supply	63
Street lighting	63
Existing Underground Services	63
Undergrounding Overhead Services	63
5.7 Ongoing Maintenance	63
5.8 Property Impacts	64
Land ownership	64
5.9 Statutory considerations	64
Consent Issues	64
Bylaw Changes and Traffic Controls	64
5.10 Cost Estimates	64
5.11 Safe System Audit	65
5.12 Risks	65
6 CONSULTATION OUTCOMES	66
7 RECOMMENDED OPTION	70
7.1 Further context investigations	70
Local area weekend traffic counts	70
Weekend parking survey	71
7.2 Further investigation of alternative options	72
Full signalisation including Reynolds Avenue	72
Left-in only at Reynolds Avenue included as an option for approval	72
7.3 Scheme modifications following consultation	73
7.4 Proposal description	73
7.5 Further scheme investigations	74
7.6 Cost estimate review	75
7.7 Traffic Controls and Parking Resolutions	75
APPENDIX A – Project Initiation Brief	76
APPENDIX B – Scheme Design Drawings	77

Sensitivity: General

APPENDIX C – Transport Modelling Reports..... 78

APPENDIX D – Crash History 79

APPENDIX E – Safe System Audit 80

APPENDIX F – Arborist Report 81

APPENDIX G – Planning Assessment..... 82

APPENDIX H – Cost Estimate..... 83

APPENDIX I – Scheme Design Drawings for Approval..... 84

APPENDIX J – Traffic Control and Parking Resolutions 85

APPENDIX K – Consultation Submission Table..... 86

Sensitivity: General

1 INTRODUCTION & BACKGROUND

1.1 Project Description

This report documents the development of the scheme design for

- Langdons Road and Greers Road intersection
- Reynolds Avenue and Greers Road intersection
- Greers Road, between Langdons Road and Harewood Road

The project features in the capital programme in the Level of Service Improvement category.

This project entails an upgrade of the existing intersection of Langdons Road and Greers Road from priority control to signalisation. This is to mitigate the adverse impact of the increased delay, safety concerns for pedestrians and cyclists, and overall intersection performance, that result from the proposed development extension of a large format retail centre (Northlink Retail Park).

The objectives of the project are:

1. To improve the Level of Service at the intersection of Langdons Road and Greers Road and mitigate the increased delay for turning movements resulting from the proposed development.
2. To improve the safety for pedestrian and cyclists from increased vehicle movements at and surrounding the intersection of Langdons Road and Greers Road.
3. To prevent rat-running trips on local roads following increased demand from the proposed development.
4. To optimise link capacity and performance on Greers Road.

Figure 1 shows the location of the scheme.

Sensitivity: General



Figure 5 : Location Map

1.2 The need for the project & work completed to date

The need for the capital project is discussed below and essentially summarises the Project Initiation Briefs.

Stage 2 of the Northlink Retail Park development breached the high traffic generator rule over the threshold of 1000 m² GLFA outline in Rule 7.2.3.10. The estimated PM peak trip generation of 598 trips/hour, a permitted activity as required by Rule 15.7.1.1, with 950 trips/hour threshold within the zone (refer to RMA/2018/2326 Application Plan TRIM 18/1002742).

There was agreement between applicant and Council that the proposed development would generate approximately 950 trips/hour across the site. Therefore, the applicant agreed to use Christchurch Assignment and Simulation Traffic (CAST) modelling to assess the impact of the proposed development.

The outputs identified that developed traffic mostly used local roads, rather than arterial road networks, to avoid increased delay at the Langdons Road / Greers Road intersection (Transport Model Memo refers to TRIM 18/1284865 and 18/1284771).

Due to this, it was agreed that full development of Stage 2 would have adverse impact on the intersection, and that an upgrade from priority control to signalised control was needed to mitigate the effects.

The development of Stage 2 was proposed and agreed to be staged, with a limited release of floor area until the intersection upgrade is completed. Stage 2 opened in May 2020, with significant changes in the transport environment, safety and traffic issues being observed.

Sensitivity: General

An application was lodged by the applicant to remove the condition preventing the full development of Stage 2 until the intersection upgrade has been complete. This was formally removed in September 2022.

Risks

- There are number of existing and proposed developments along the Greers Road and Northcote Road corridors that require high level of collaboration and integration.
- The current Annual Plan shows the Greers Road/Langdons Road traffic signals being installed prior to the Greers Road/Sawyers Arms Road/Northcote Road signals. This will result in greater traffic impacts to Greers Road traffic in the interim period as the expected volume reduction from rerouting onto Sawyers Arms Road will not be recognised initially.
- Stage 2 includes three blocks of the development (A, B and C). Nevertheless, there is still an issue of the effects of the increased vehicle movements that result from Block A and B.
- Demands for all modes of transport on Langdons Road are expected to increase significantly.

Assumptions

- The upgrade of the intersection of Sawyers Arms Road and Greers Road, and Northcote Road is part of the current LTP and will commence in future, which may mitigate the traffic impact that results from the proposed development.

1.3 Project Budget

The budget for each project is outlined below in Table 1.

Year	WBS 542/003089 TRIM CP503969
FY 23	\$55,388
FY 24	\$100,000
FY 25	\$500,000
FY 26	\$1,344,613
Total	\$2,000,000

Table 1: Project Budgets (SAP)

Sensitivity: General

1.4 Project Sponsor and Team

The Project Sponsor and team is outlined in Table 2 below.

Role	Name	Unit
Project Sponsor	Stephen Wright	
Role	Name	Organisation/Unit
Project Manager	David Sun	
Lead Scheme Designer	Ben Dodgshun	Peloton
Consultation Leader	Irene MacArthur	
Transport Planner	Liqi Chen	
Area Engineer	Mike Thomson	
Signals Engineer	Alex Lumsdon	Peloton
Network Operations Overview	-	
Strategy and Planning	Kate McNab	
Transport Modelling	Liqi Chen	
Economic Evaluation	-	
Property Consultant	-	
Cost Estimator	Seamus Drown	Peloton
Landscape Design	-	
Safety Auditor	GHD	GHD
Funding		Funding Team (Consult only)

Table 2: Project Sponsor and Team

1.5 Project Timeframes & Milestones

The project timeframes and milestones are outlined in Table 3.

Milestone	Date
Community Board Briefing	Sep-23
Consultation	Oct-23
Scheme Approval	Dec-23
Detailed Design Completed	Jan-24
Construction	Mar-24

Table 3: Project Milestones and Timeframes

Sensitivity: General

2 CONTEXT, ENVIRONMENT & EXISTING ISSUES

2.1 Land Use Environment

Land Use

The surrounding land use is as shown in Figure 6.



Figure 6: Overview of adjacent land use

District Plan Zoning

The District Plan zones are shown in Figure 7 below. The land adjacent to the road is predominantly zoned “Residential Suburban Zone”.



Figure 7: District Plan Map

Sensitivity: General

Nearby reserves include:

- Tralee Reserve
- Paprika Reserve
- Bishopdale Park
- Morrison Avenue Bowling Club
- Farrington Reserve

Nearby Schools include:

- Bishopdale School
- Casebrook Intermediate
- Papanui High School
- Isleworth School
- Aratapu Preschool
- Cotswold School

Nearby commercial centres include:

- Bishopdale Mall
- Northlink Shopping Centre
- Northlands Mall

2.2 Transport environment

This section provides a description of the existing transport environment. The project is generally within a 50 km/h speed limit area, except for Langdons Road, which is posted at 40 km/h.

The CSTP (Christchurch Strategic Transport Plan) outlines a series of network maps that define each road's role in the overall network.

Pedestrians

Figure 4 shows the walking network. The walking network seeks to provide attractive streetscapes for walking, improving safety and reducing conflict with all other modes.

Existing pedestrian infrastructure includes:

- Footpaths on Greers Road, Langdons Road, Reynolds Ave, Bainton Street, and Hoani Street.
- Mid-block signalised crossing on Greers Road at Bishopdale School.
- Pedestrian refuge crossing on Greers Road, north side of the Langdons Road intersection.
- Pedestrian refuge crossing on Langdons Road, at the intersection of Greers Road.

Sensitivity: General

- Kerb crossing on Greers Road, south side of the Langdons Road intersection.
- Kerb crossing on Reynolds Ave at the intersection of Greers Road.
- Kerb crossing on Bainton Street at the intersection of Greers Road.
- Kerb crossing on Hoani Street at the intersection of Greers Road.

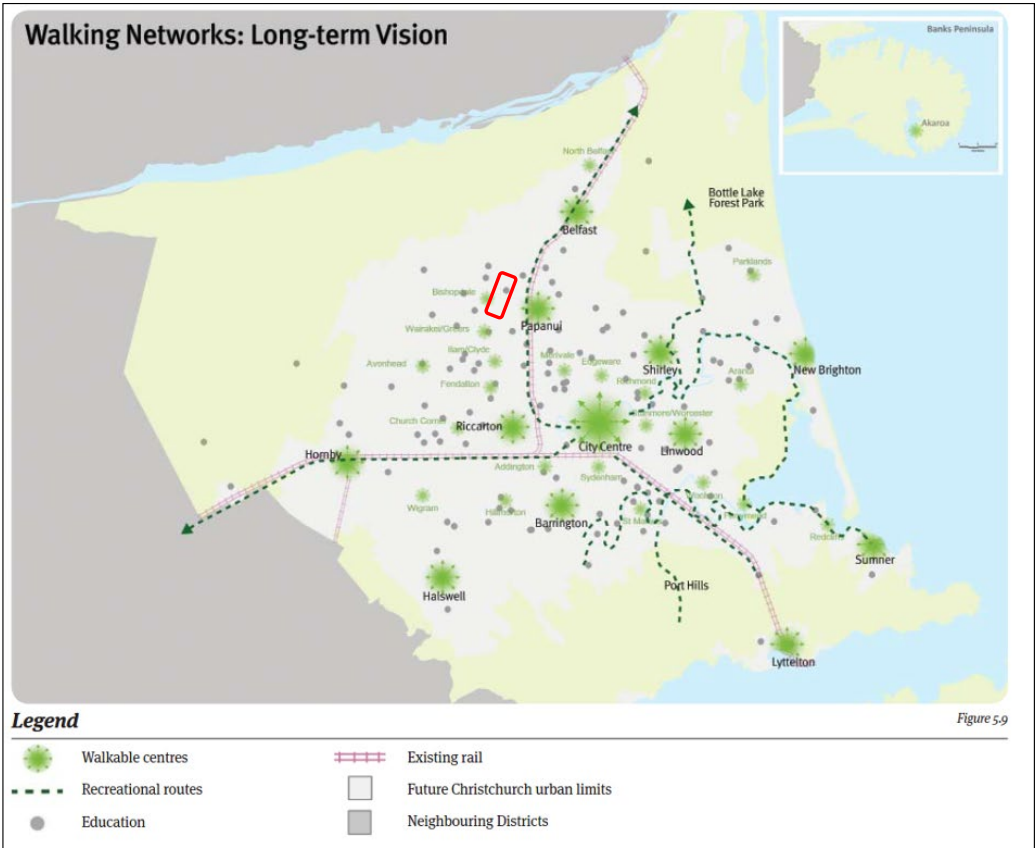


Figure 8: Walkable Centres (Source: CTSP, 2012)

Cycling

Figure 9 shows the Local and Recreational cycleways. Greers Road is a local cycleway. A local cycleway will provide safe connections for people who want to access the major cycle routes and will offer most school pupils in Christchurch a safe environment in which to travel. It is intended that they will be either off-road paths, on-road cycle lanes or follow quiet local streets.

Sensitivity: General

Existing cycle facilities are provided as detailed below:

Greers Road

- Cycle lanes either side of the road.



Langdons Road

- No formal cycle lane, although a scheme for cycle lanes on Langdons Road is being developed in a separate project.



Sensitivity: General

Reynolds Ave

- No formal cycle facilities



Bainton Street

- No formal cycle facilities



Sensitivity: General

Hoani Street

- No formal cycle facilities



In addition to this, the Wheels to Wings Major Cycle Route is to be constructed along Harewood Road over a similar timeframe to this project.

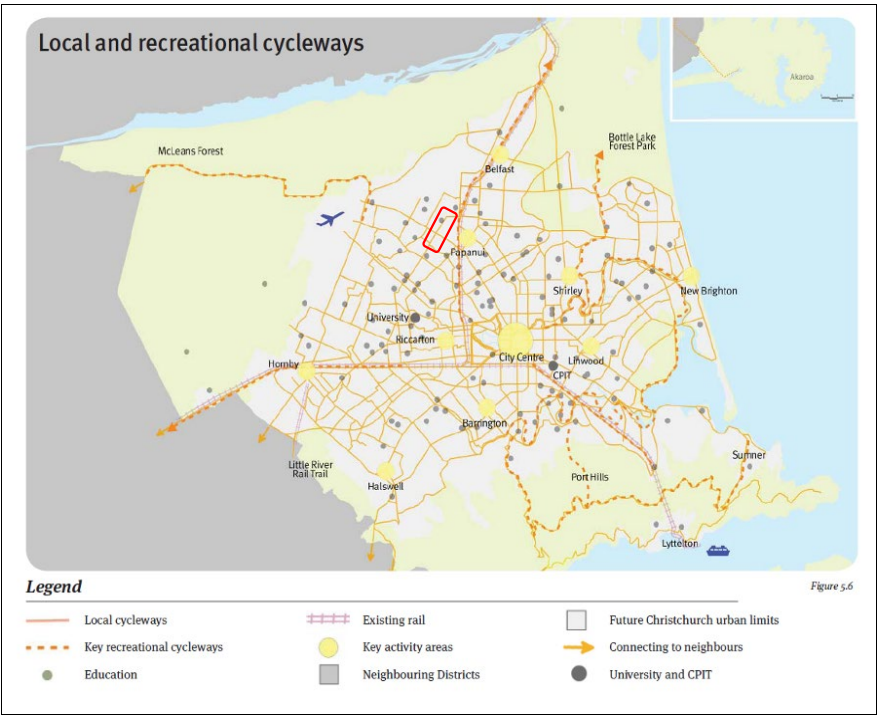


Figure 9: Local and Recreational Cycle Network (Source: CTSP, 2012)

Sensitivity: General

Public Transport Facilities and Routes

Figure 10 shows the Core Public Transport network. The roads concerned within this site are not shown on this network. The aim of the Core Public Transport routes is to ensure direct connections to the Central City.

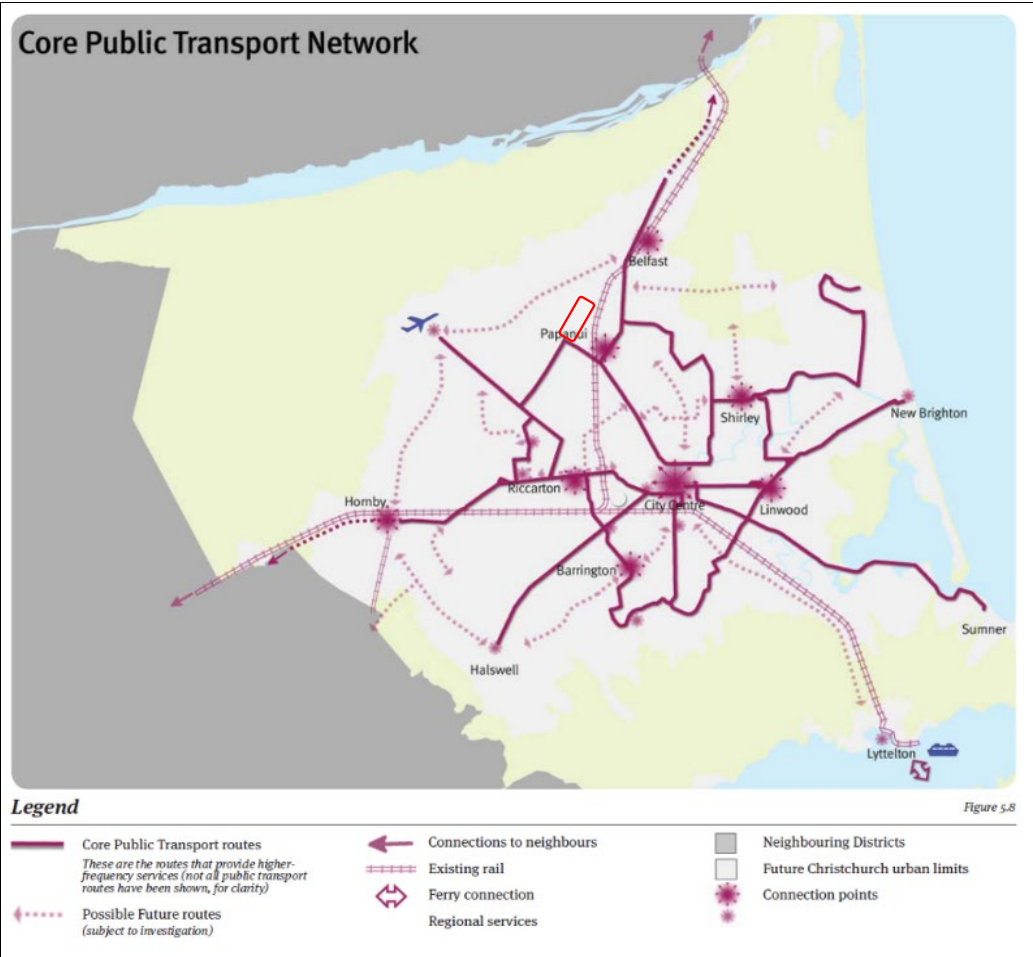


Figure 10: Core Public Transport Network (Source: CTSP, 2012)

Sensitivity: General

There are no bus services using Greers Road near Langdons Road, nor using Reynolds Ave, Bainton Street and Hoani Street, as shown in Figure 11.

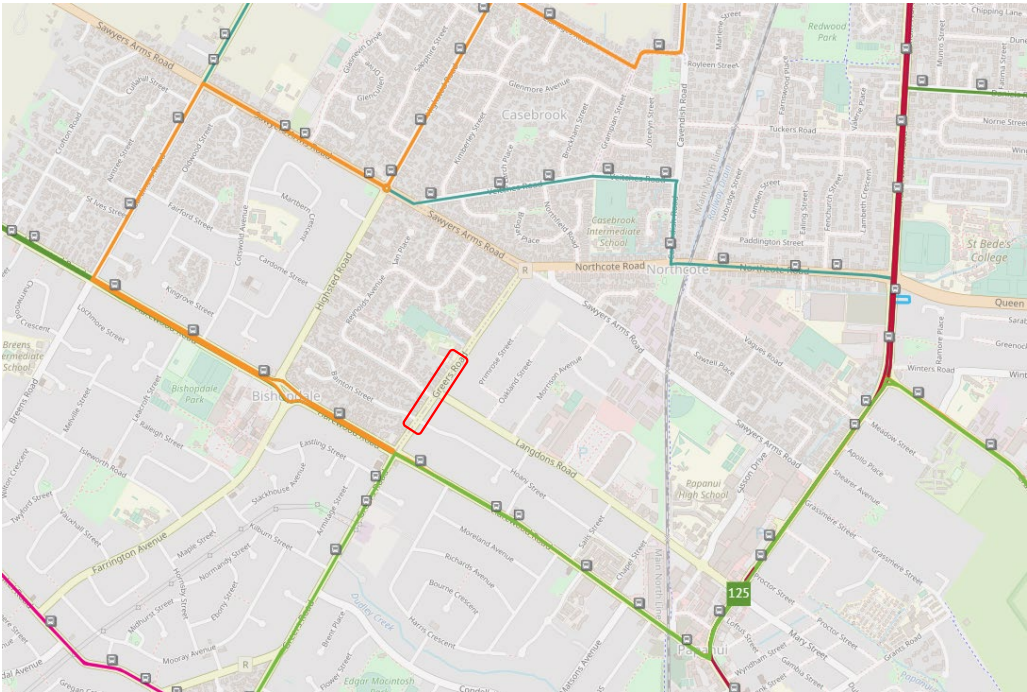


Figure 11: Bus routes

Sensitivity: General

Road Network

District Arterials provide for traffic travelling across the city and are connections to the State Highways. They reflect high demand for longer distance travels at a metropolitan (city) level of significance.

The current road hierarchy is:

Greers Road – Minor Arterial

Langdons Road – Primary Collector

Harewood Road to the south of the site is a Minor Arterial, and Sawyer Arms Road and Northcote Road to the north are Major Arterials.

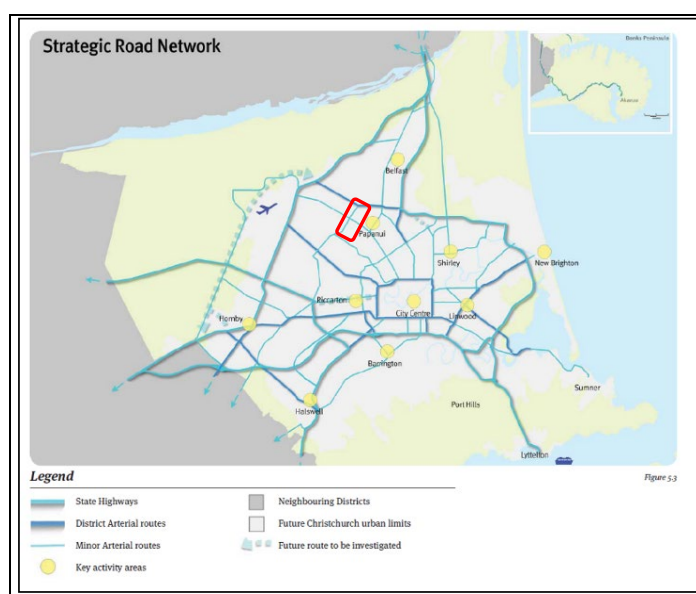


Figure 12: Strategic Road Network (Source: CTSP, 2012)

Reynolds Avenue Local Road Network

A network of local roads exists in the area to the west of the intersection bounded by Greers Road, Bainton Street, Highsted Road and Sawyers Arms Road, presented in Figure 13, below. This area is approximately 550 m wide east to west and 600 m north to south and is all zoned residential. It includes Reynolds Avenue, Drysdale Street, and several smaller cul-de-sacs. Access into this area is via intersections with Greers Road, Sawyers Arms Road, and Highsted Road. It has a curvilinear alignment, with pedestrian connections in several locations within and to the outside of the area.

Sensitivity: General

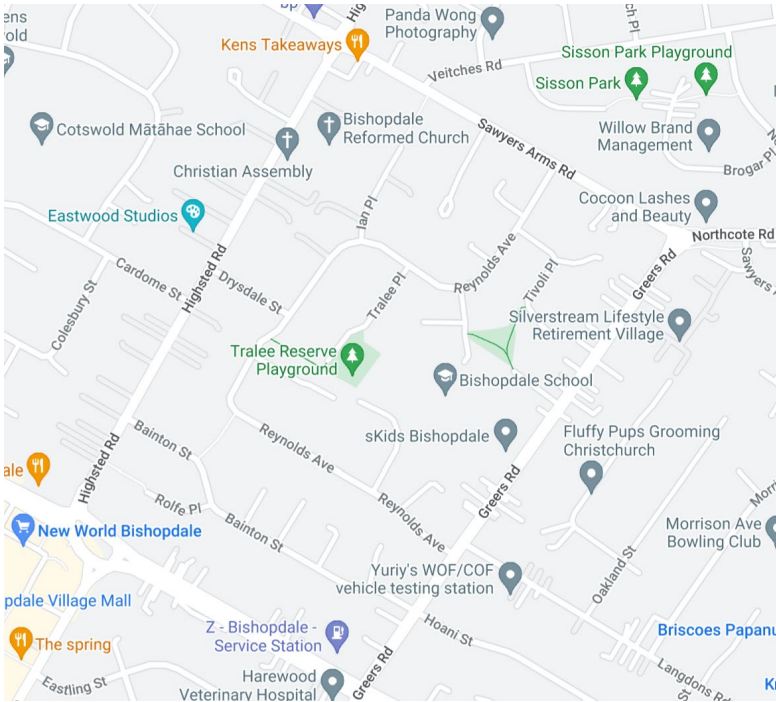


Figure 13: Reynolds Avenue Local Road Network (image from Google)

Traffic counts have been undertaken at the three access points into this area to determine the most common movements into and out of the area. This does not specify the origin and destination of the trips. A summary of the counts is presented in the tables below.

Table 4: Reynolds Avenue/Greers Road turning counts.

	Reynolds Avenue		Greers Road			
	Left out	Right out	Left in	Right in	Northbound	Southbound
7am-9am	52	8	12	16	1457	1935
1pm-2pm	21	7	10	18	785	809
4pm-6pm	48	8	28	51	2092	2000
Totals	121	23	50	85	4334	4744

Table 5: Reynolds Avenue/Sawyers Arms Road turning counts.

	Reynolds Avenue		Sawyers Arms Road			
	Left out	Right out	Left in	Right in	Eastbound	Westbound
7am-9am	19	21	20	29	821	797
1pm-2pm	5	6	13	5	380	387
4pm-6pm	39	27	40	23	988	918
Totals	63	54	73	57	2189	2102

Sensitivity: General

Table 6: Drysdale Street/Highsted Road turning counts.

	Drysdale Street		Highsted Road			
	Left out	Right out	Left in	Right in	Northbound	Southbound
7am-9am	129	14	10	41	439	964
1pm-2pm	27	6	9	23	281	251
4pm-6pm	69	10	20	98	1167	731
Totals	225	30	39	162	1887	1946

As seen in the above tables, egress from the area in the morning peak is primarily via Drysdale Street turning left onto Highsted Road with 129 movements over the two-hour period, followed by the left out from Reynolds Avenue to Greers Road with 52 movements. Of these 52 left turn out movements onto Greers Road, 27 were during the period between 8:30 am and 9 am, suggesting that many of these are school-related trips. This was not observed at any of the other sites.

Entry into the area in the evening peak is primarily via the right turn from Highsted Road onto Drysdale Street with 98 movements, followed by the right turn in from Greers Road to Reynolds Avenue with 51 movements. Both are the reverse of the largest morning peak flows.

Of interest are the evening peak left-turn out movements from Reynolds Avenue onto both Greers Road and Sawyers Arms Road. At Greers Road, the evening peak flows are comparable to the morning peak flows, whilst at Sawyers Arms Road the evening peak flows are twice the morning peak flows. As the land use in the area is almost entirely residential, it is possible that some of these movements are drivers “rat-running”, making trips through the area to destinations beyond it. As the origin and destination of these trips is not known, this is not possible to confirm. The volumes themselves are not high enough to be of any concern or warrant specific traffic modelling.

Looking further at the movements at the intersection of Reynolds Avenue and Greers Road, both turning movements into Reynolds Avenue are relatively low through much of the day before increasing in the evening peak. Right-turn movements have slightly higher volumes than the left-turn movements, despite this being a more difficult movement to make. Right-turn out movements are low throughout the day, peaking at 7 vehicles per hour during the interpeak. This is likely a reflection of the difficulty of turning right onto Greers Road, close to Langdons Road.

Sensitivity: General

Figure 14 shows the freight network. Greers Road is a CCC Secondary Over Dimension route as shown in Figure 15.

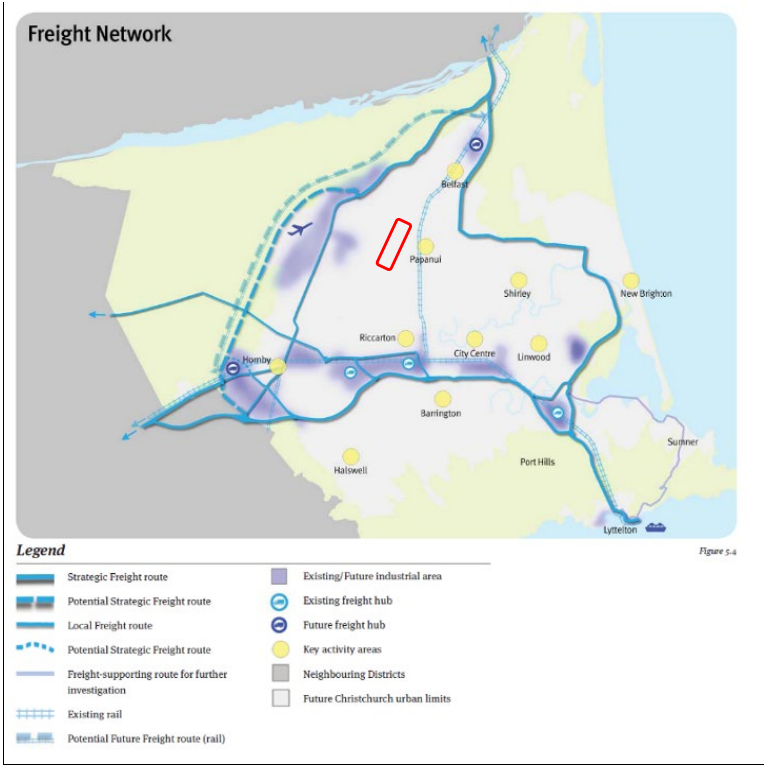


Figure 14: Strategic Freight Network (Source: CTSP, 2012)

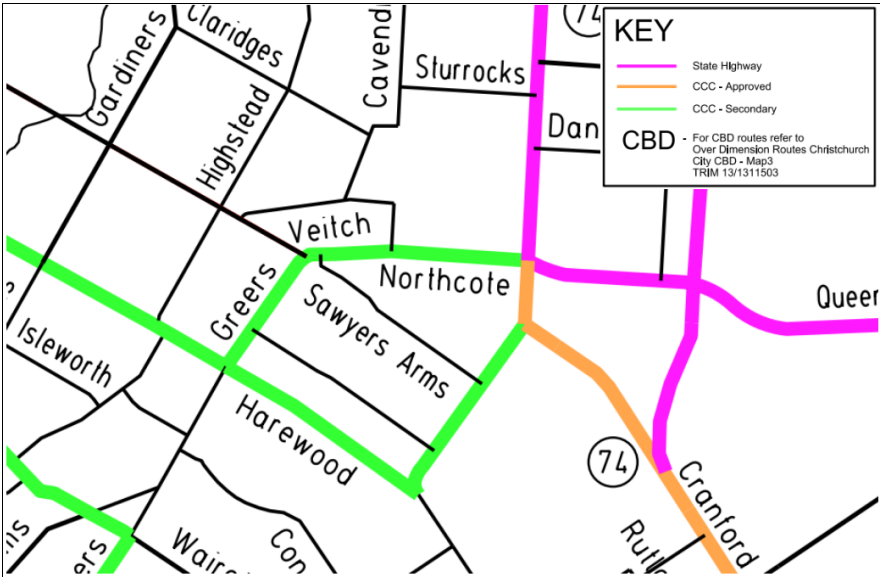


Figure 15: Over dimension Vehicle Route (Source: TRIM 13/1311503)

Sensitivity: General

Geometry



Figure 16. Greers Road / Langdons Road intersection

Road widths are as follows:

Greers Road – 13.0 m (typical)

Langdons Road – 12.0 m

Reynolds Avenue – 9.8 m

Sensitivity: General

There are multiple unique road features within the site. Greers Road includes a signalised mid-block crossing at Bishopdale School, a pedestrian refuge at the intersection of Langdons Road, no right turn bay for vehicles turning onto Langdons Road, and cycle lanes either side. There is also a kerb crossing across Greers Road with no refuge, south of Langdons Road, and a kerb crossing south of Reynolds Ave opposite a vehicle crossing.



Figure 17. Mid-block crossing on Greers Road



Figure 18. Pedestrian refuge on Greers Road

Sensitivity: General



Figure 19. Kerb crossing on Greers Road, south of Langdons Road



Figure 20. Kerb crossing to vehicle crossing on Greers Road

Sensitivity: General

Langdons Road has a pedestrian refuge at the intersection of Greers Road, along with deep dish channel terminating at the intersection. Langdons Road is stop controlled at the intersection with Greers Road.



Figure 21. Langdons Road intersection with Greers Road



Figure 22. Kerb and channel to dish channel on Langdons Road

Sensitivity: General

Reynolds Ave has a threshold treatment with speed hump near the intersection of Greers Road and is give way controlled.



Figure 23. Reynolds Avenue intersection with Greers Road

Sensitivity: General

Bainton Street and Hoani Street are both stop controlled at the intersection of Greers Road.



Figure 24. Bainton Street intersection with Greers Road



Figure 25. Hoani Street intersection with Greers Road

Sensitivity: General

The intersection turning volumes

Turning counts, for Greers Road / Langdons Road / Reynolds Avenue, were last undertaken in 2022 as shown in Figure 26 and Figure 27.

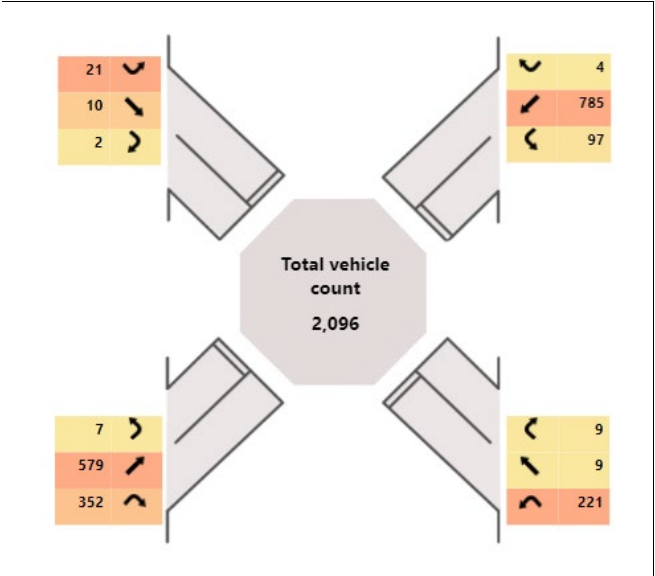


Figure 26: Intersection turning counts – morning peak

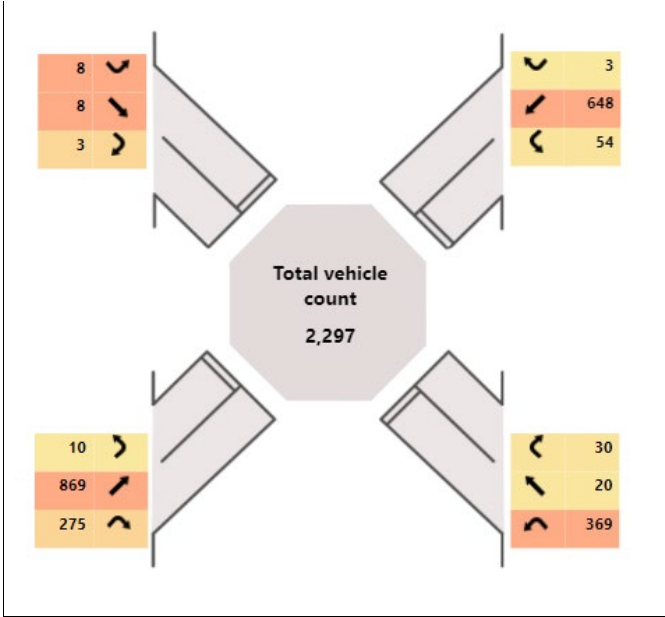


Figure 27. Intersection turning counts – evening peak

Sensitivity: General

Predicted Future Turning Volumes

The installation of the traffic signals alongside other network changes and development will result in a change in traffic flows in the future. In particular, traffic volumes on Langdons Road are expected to increase due to the attractiveness of the traffic signals and future stages of the Northlink development. Future traffic flows (without the Greers Road/Northcote Road/Sawyers Arms Road scheme in place) are presented in Table 7 and Table 8, with a more detailed analysis of the changes presented in the CAST modelling summary reports.

The intersection flows below are shown for the scenario with Reynolds Avenue being restricted to left-in/left-out only at Greers Road. The overall intersection flows remain consistent across the options with different potential turn restrictions applied to Reynolds Avenue.

Table 7: Modelled movement and delay summary – morning peak

Intersection	Approach	Mvt	Base - AM Peak		Option 1 - AM Peak	
			Volume	Delay (s)	Volume	Delay (s)
Langdons / Greers	Greers North	Left	22	3	42	11
		Thru	909	3	688	66
	Langdons East	Left	225	24	328	20
		Right	46	76	84	54
	Greers South	Thru	680	3	742	6
		Right	270	33	223	30
Greers / Reynolds	Greers North	Thru	1117	12	1016	0
		Right	18	4	N/A	N/A
	Greers South	Left	11	3	11	3
		Thru	903	3	938	3
	Reynolds West	Left	47	15	28	15
		Right	0	98	N/A	N/A

Table 8: Modelled movement and delay summary – evening peak

Intersection	Approach	Mvt	Base - PM Peak		Option 1 - PM Peak	
			Volume	Delay (s)	Volume	Delay (s)
Langdons / Greers	Greers North	Left	5	2	6	10
		Thru	875	2	592	73
	Langdons East	Left	199	22	340	16
		Right	17	169	232	91
	Greers South	Thru	1172	7	1104	14
		Right	183	20	192	28
Greers / Reynolds	Greers North	Thru	988	3	933	0
		Right	87	74	N/A	N/A
	Greers South	Left	0	6	7	5
		Thru	1328	6	1253	5
	Reynolds West	Left	26	73	42	41
		Right	5	75	N/A	N/A

Current Midblock Traffic Flows

The most recent daily traffic flows are shown in Figure 28 to Figure 31

Sensitivity: General

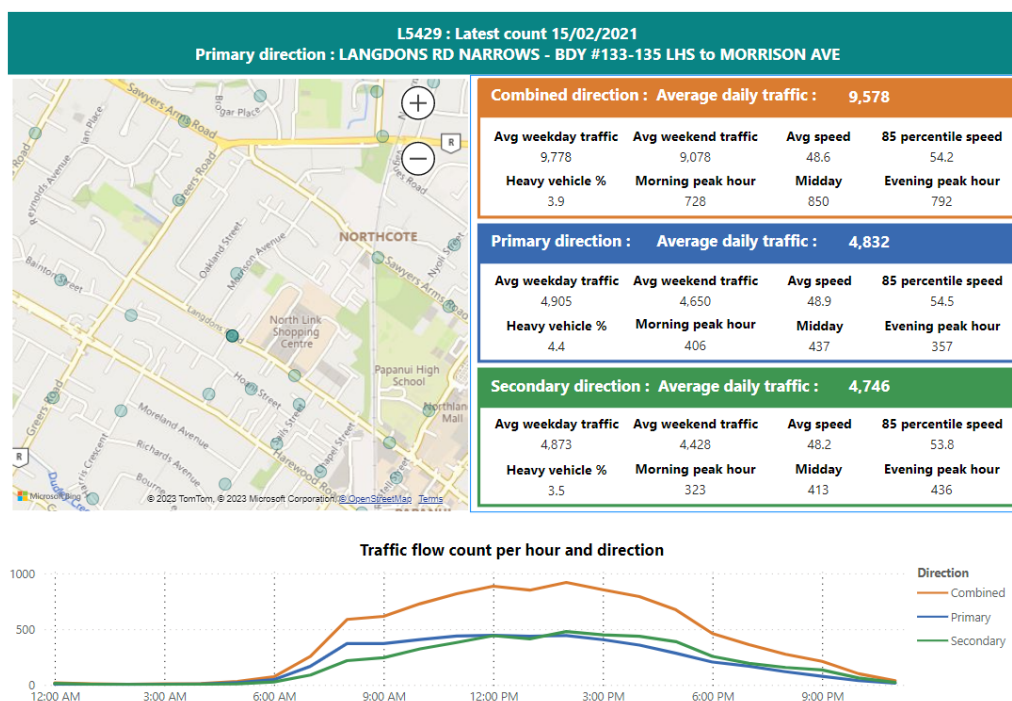


Figure 28: Daily traffic volumes – Langdons Road

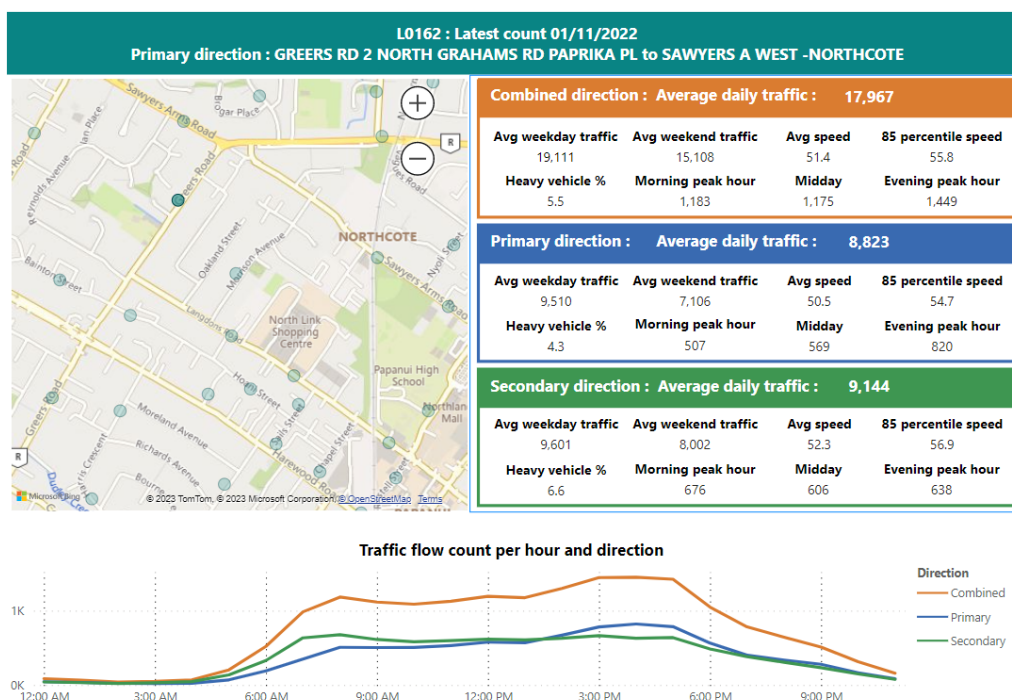


Figure 29. Daily traffic volumes – Greers Road

Sensitivity: General

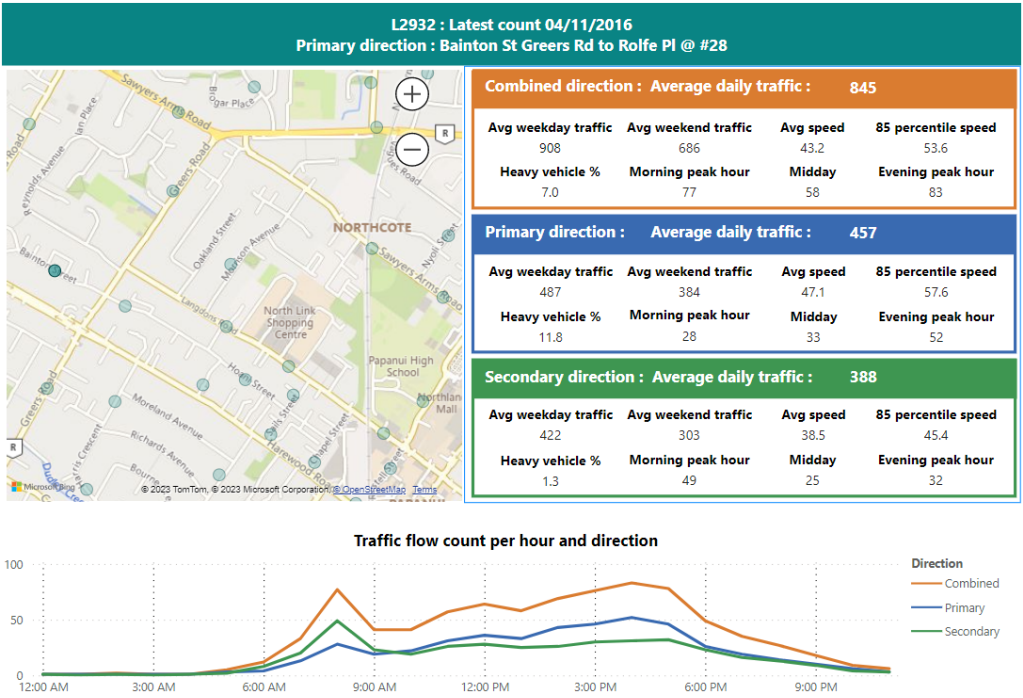


Figure 30. Daily traffic volumes – Bainton Street

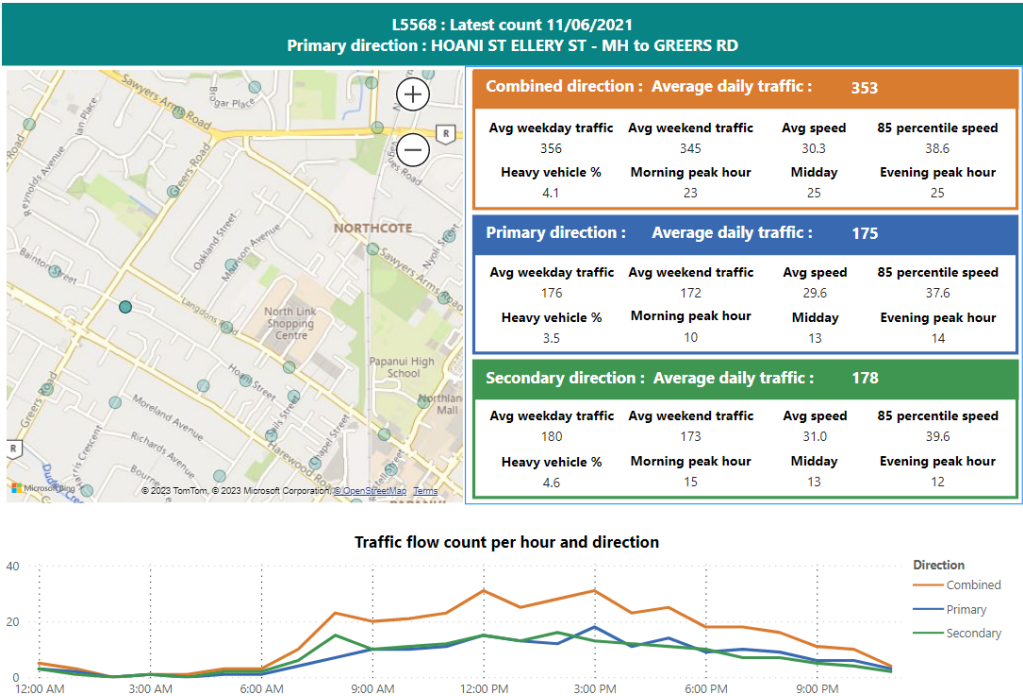


Figure 31. Daily traffic volumes – Hoani Street

Sensitivity: General

NZ Road Safety Strategy and Safe Systems

NZ Road Safety Strategy – Road to Zero, is the Government's strategy to guide improvements in road safety over the period 2020–2030, which builds on previous Safer Journeys and the Safe System approach 2010-2020.

Road to Zero outlines a strategy to guide improvements in road safety in New Zealand over the next 10 years. It outlines the importance of road safety in New Zealand, the role of a road safety strategy in driving improvements, and how the elements of this document were developed. It sets out vision of a New Zealand where no one is killed or seriously injured in road crashes. It sets out where we want to be by 2030, as a step towards achieving our overarching vision by the seven guiding principles below:

1. We promote good choices but plan for mistakes
2. We design for human vulnerability
3. We strengthen all parts of the road transport system
4. We have a shared responsibility for improving road safety
5. Our actions are grounded in evidence and evaluated
6. Our road safety actions support health, wellbeing and liveable places
7. We make safety a critical decision-making priority

Sensitivity: General

To get to a Road to Zero vision, a target of 40 percent reduction in deaths and serious injuries by 2030 is set. This will be achieved through the following actions in five key areas:

- Infrastructure improvements and speed management
- Vehicle safety
- Work-related road safety
- Road user choices
- System management.



Figure 32: NZ Road Safety Strategy – Road to Zero 1

¹ Source: NZ Government, Dec 2019 (NZ Road Safety Strategy 2020-2030 – Road to Zero)

Sensitivity: General

Risk Mapping

Risk Mapping uses historical traffic and crash data to produce colour-coded maps to illustrate the relative level of risk on sections of the road network. Waka Kotahi define collective risk as a measure of the risk of deaths and serious injuries within 50 metres of an intersection in a crash period. The personal risk is calculated from the collective risk divided by a measure of traffic volume.

The risk map shown in Figure 33 and Figure 34 show the assessed collective and personal risk of the route of all nearby roads respectively. This assessment indicates a collective risk medium rating and a personal risk medium high risk rating for Greers Road.

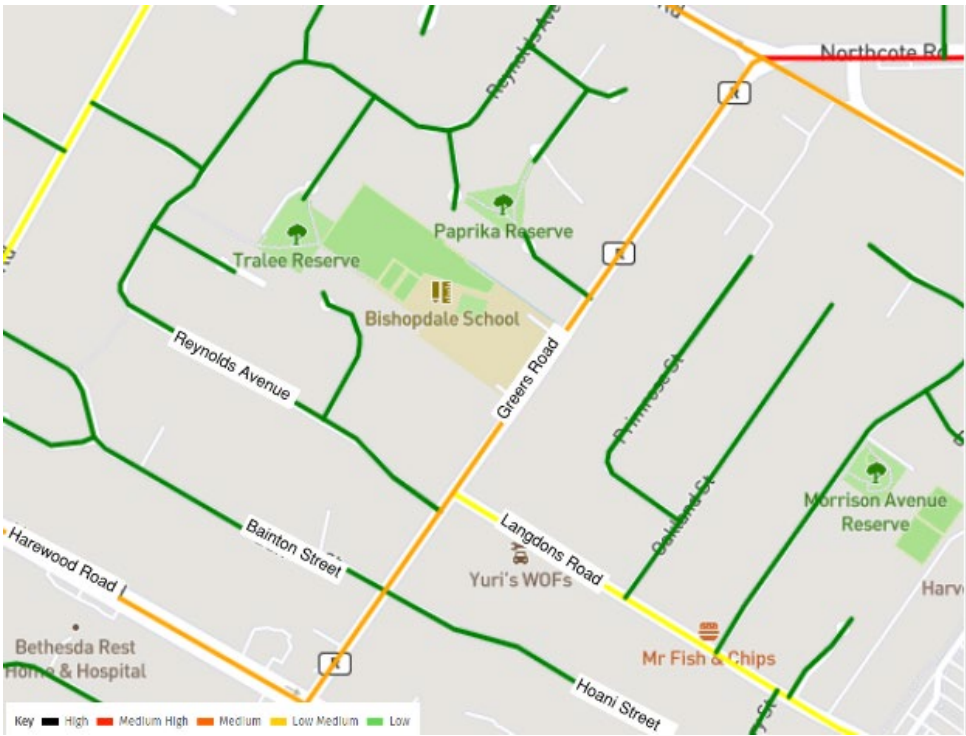


Figure 33: Collective Risk

Sensitivity: General

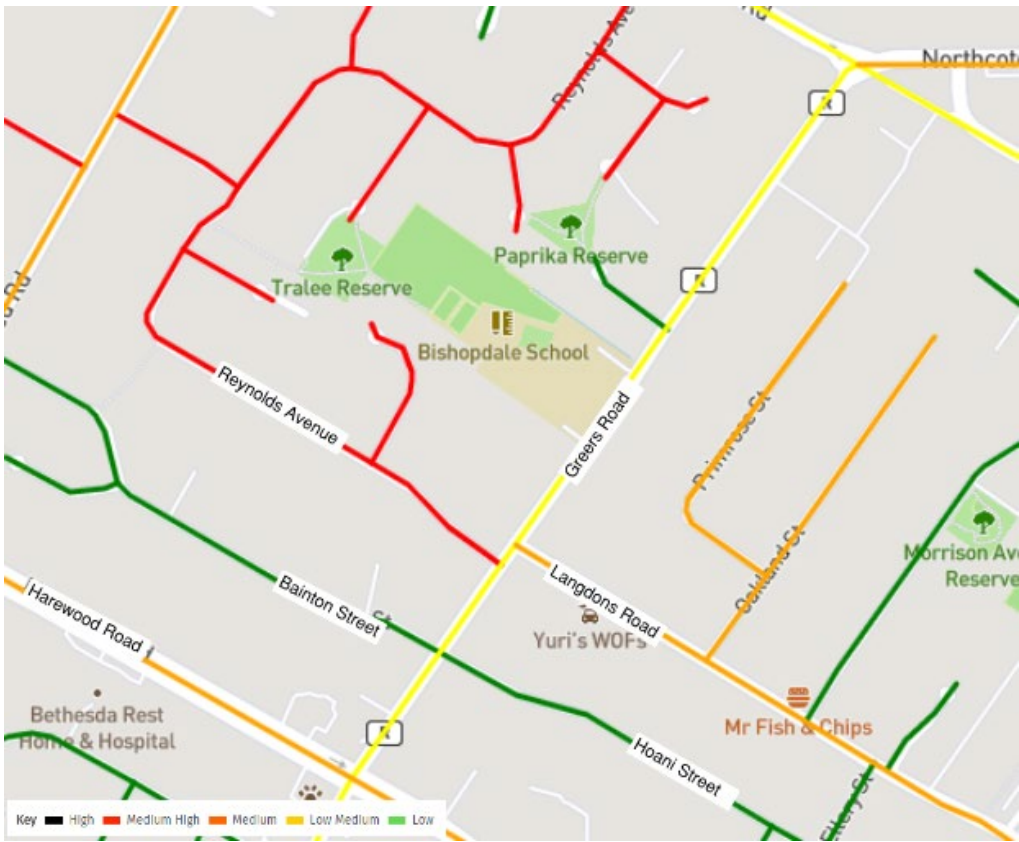


Figure 34: Personal Risk

Sensitivity: General

2.3 Crash History

Figure 35 shows location of crashes for the last 5 years (2018-2022). Of the 13 reported crashes, one was a serious injury crash, six were minor injury and six were non-injury. Collision diagrams are shown in the figures following.

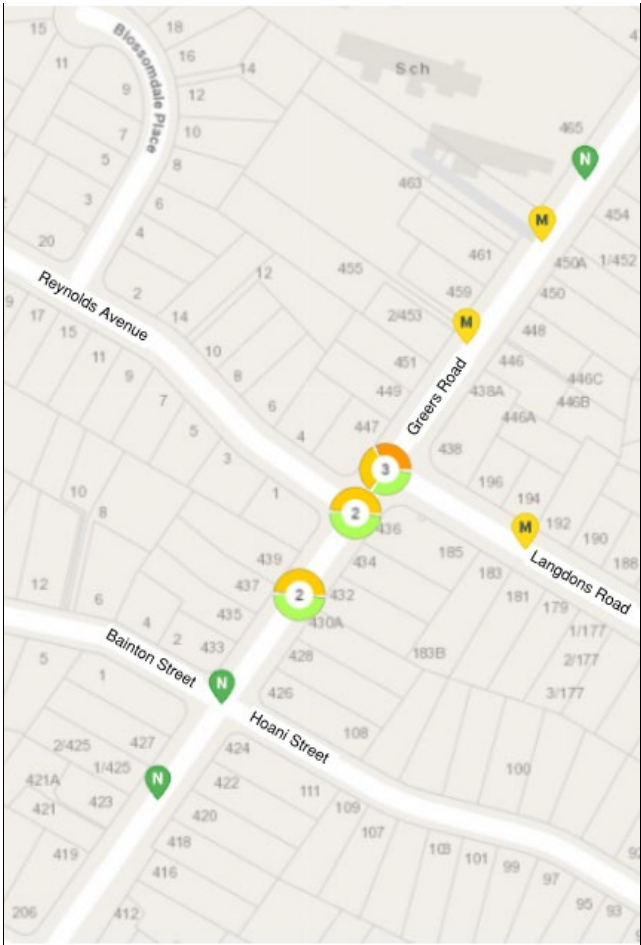


Figure 35: Crash Location Diagram

Sensitivity: General

Greers Road including and to the north of the intersection with Langdons Road

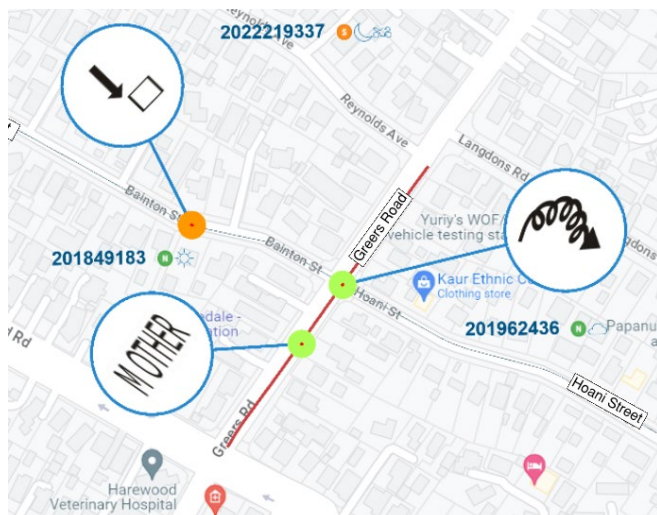


Langdons Road and Reynolds Avenue intersections and approaches to Greers Road, Greers Road south to Bainton Street.



Sensitivity: General

Greers Road south of Bainton Street



Of the 13 crashes within and adjacent to the project extents, four occurred at or related to the intersection of Langdons Road and Greers Road. Two were loss of control crashes involving vehicles striking the pedestrian refuge island on Greers Road. One was a suspected medical event, the other a motorcyclist swerving to avoid a potential collision with a group of children. Speed was not a factor in either crash. The other crashes were a rear-end crash at the back of a traffic queue on Langdons Road, with sunstrike being a factor, and a vehicle travelling at high-speed failing to make the left turn from Langdons Road onto Greers Road and colliding with a northbound vehicle. Alcohol was a factor in the latter crash, which resulted in a serious injury.

Three crashes occurred at the intersection of Reynolds Avenue and Greens Road. Two were right turn against crashes involving drivers turning right into Reynolds Avenue. A contributing factor to one crash was that the right turn was attempted through a queue of traffic waiting to turn right into Langdons Road, restricting visibility. The other crash was a driver failing to make a right turn out and crashing into a parked car on Greens Road.

A minor injury pedestrian crash was reported between Bainton Street and Reynolds Avenue where a child crossing the road on a scooter in heavy traffic and low light misjudged a gap and was struck by a vehicle travelling north on Greens Road.

There were no common crash trends amongst the other reported crashes along the remainder of Greens Road within the study area. However, two of the crashes resulted from vehicles running off the road to the left, one of which led to a head-on collision following the driver over-correcting into the opposing lane. One was travelling at 60 km/h, the other decamped from the scene.

Four of the crashes were at night. One of the crashes was during wet weather; this was the high-speed failure to make the left-turn from Langdons Road onto Greers Road.

2.4 Opportunities and constraints

An opportunity of extending cycle lanes to Harewood Road to connect to the Wheels to Wings Major Cycle Route and fill a missing link in the local cycle network has been identified.

Sensitivity: General

2.5 One Network Framework (ONF)

Most recently, One Network Framework (ONF) classification system has been implemented by Waka Kotahi, replacing the old Network Management Plan (NMP) developed for Christchurch. ONF provide high level design concepts network classification based on an amalgamation of movements and places which is in essence very similar to NMP approach that aims to better manage and plan for the transport system enabling better optimisation and unlocking use potential.

The published categories included some indicative categorisation factors and measures that at the time were indicative only and served to demonstrate the concepts being presented.

The movements and places as per the ONF are shown in **Table 11**.

Table 11: One Network Framework

One Network Framework – Movements and Places									
Route	Walking	Public Transport	Cycleways	Freight	General Traffic	Place	Movement	Urbanity	Street Family
Greers Road	W2	PT5	C2	F4	GT4	P4	M2	Urban	Urban Connectors
Langdons Road	W2	PT5	C2	F5	GT5	P4	M3	Urban	Urban Connectors
Reynolds Ave	W3	PT5	C3	F6	GT6	P4	M4	Urban	Local Streets
Bainton Street	W3	PT5	C3	F6	GT6	P4	M4	Urban	Local Streets
Hoani Street	W3	PT5	C3	F7	GT7	P4	M4	Urban	Local Streets

Sensitivity: General

3 OUTCOMES AND OBJECTIVES

3.1 Strategic Transport Context

Introduction

The current strategic direction of land transport in New Zealand at the national, regional and local levels have consistent themes of improving travel choice, affordability, environmental sustainability, efficiency of the transport network and improving safety. The CTSP was developed in the strategic context of relevant national, regional and city council plans and therefore maintains consistency with other plans and strategies as shown in Figure 36.

Figure 36 diagrammatically shows the relevant national and regional strategies (on the right) that inform and influence local transport strategy, the Christchurch Transport Strategic Plan (CTSP). Figure 36 also shows the local pans which should inform and be consistent with the CTSP. The CTSP has a key relationship with the Greater Christchurch Transport Statement; both of these documents are described below in more detail.

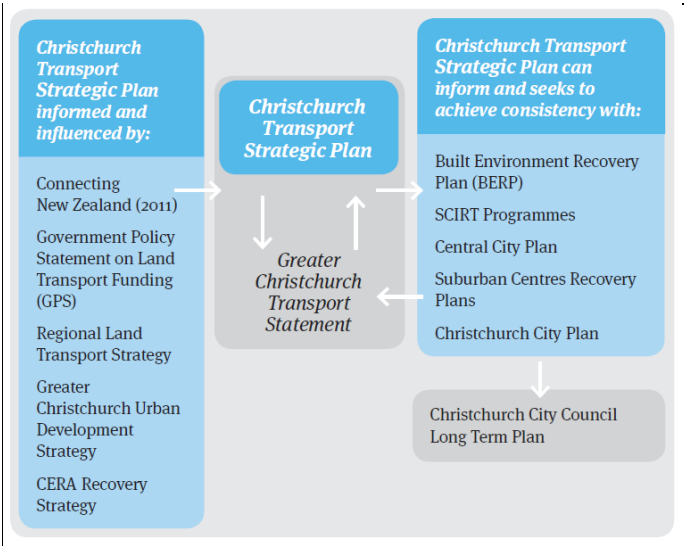


Figure 36: Strategic Context (Source: CTSP, 2012)

National Strategies

Government Policy Statement (GPS) 2021/22–2030/31

“The purpose of the transport system is to improve people’s wellbeing, and the liveability of places. It does this by contributing to five key outcomes, identified in the Ministry of Transport’s Transport Outcomes Framework”.

Sensitivity: General

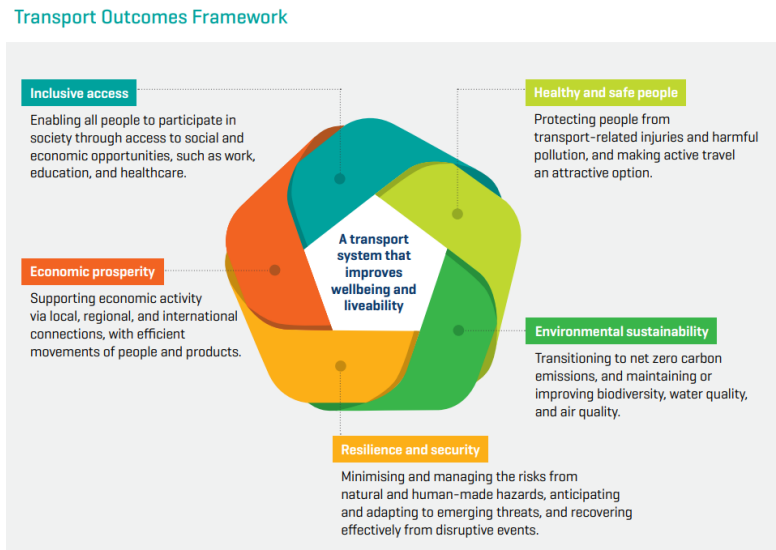


Figure 37. GPS Transport Outcome Framework (Source: GOVERNMENT POLICY STATEMENT ON LAND TRANSPORT: 2021/22 – 2030/31)

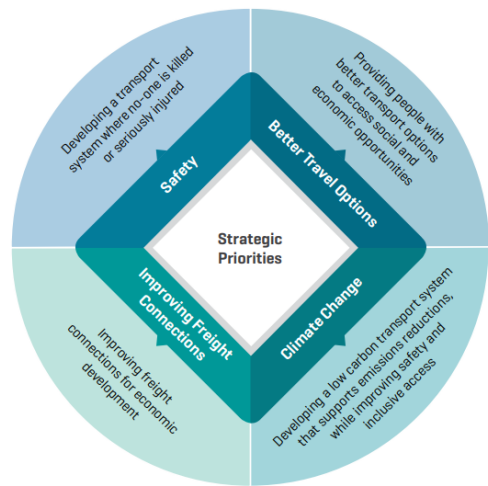


Figure 38. Strategic priorities of the GPS (Source: GOVERNMENT POLICY STATEMENT ON LAND TRANSPORT: 2021/22 – 2030/31)

Sensitivity: General

Regional Strategies

Canterbury Regional Land Transport Strategy – (RLTS 2012–2042)

The RLTS seeks that Canterbury has an accessible, affordable, integrated, safe, resilient and sustainable transport system by achieving the following goals:

- Ensure a resilient, environmentally sustainable and integrated transport system
- Increase transport safety for all users
- Protect and promote public health
- Assist economic development
- Improve levels of accessibility for all
- Reduced greenhouse gas emissions from use of the domestic transport system

The Greater Christchurch Transport Statement

The Greater Christchurch Transport Statement (GCTS) set an overarching framework for transport in the Greater Christchurch area with a specific objective to “Provide more options for people to walk, cycle and use public transport”. Alongside the framework of the GCTS, the CCC has developed the Christchurch Transport Strategic Plan (CTSP) 2012 which establishes the goals, objectives and activities to be undertaken to support the recovery of Christchurch, with the vision “To keep Christchurch moving forward by providing transport choices to connect people and places”.

Figure 39 shows the Transport outcomes sought by the GCTS and the associated objectives. The GCTS seeks a transport system will support economic and social well-being by connecting people, goods and services with places, while minimising the environmental impacts and creating liveable communities.

Transport Outcomes		Objectives
Journey Links between people & places	Connectedness	Integrate land-use activities with transport solutions, enabling ease of movement between places
	Resilience, reliability and efficiency	Optimise the use of existing transport assets through managing travel demand and networks
		Provide safe, efficient and resilient links to connect people and places
		Ensure efficient and predictable travel time between key places
	Travel choice	Provide more options for people to walk, cycle and use public transport
Safety	Safe journeys	Minimise the severity and social cost of crashes
		Improve personal security
Environment	Liveable communities	Support place-making, and 'active travel' and public transport, reducing emissions and improving public and environmental health
	Low environmental impacts	

Figure 39: Greater Christchurch Transport Statement

Sensitivity: General

Urban Development Strategy for Greater Christchurch and Land Use Recovery Plan (UDS/LURP)

The UDS and LURP seek to develop a transport system that meets the changed needs of people and businesses and enables accessible, sustainable, affordable and safe travel choices.

Local Strategies

The Christchurch Transport Strategic Plan

The CSTP is a non-statutory Plan that updates Christchurch's local transport policy in relation to relevant statutory plans, in particular the Canterbury Regional Land Transport Strategy, Regional Policy Statement, Greater Christchurch Urban Development Strategy and Regional Public Transport Plan, placing a strong emphasis on travel choice by establishing strong networks for all transport options during the next 30 years.

The CTSP seeks to provide transport choices to connect people and places, with goals to:

- Improve access and choice
- Create safe, healthy and liveable communities
- Support economic vitality
- Create opportunities for environmental enhancements

3.2 Project Objectives

Based on the 'need for the project' and consideration of the background information the aim and objectives of the intersection project are to:

1. Improve the Level of Service at the intersection of Langdons Road and Greers Road and mitigate the increased delay for turning movements resulting from the proposed development.
2. Improve the safety for pedestrian and cyclists from increased vehicle movements at and surrounding the intersection of Langdons Road and Greers Road.
3. Prevent rat-running trips on local roads following increased demand from the development.
4. To optimise link capacity and performance on Greers Road.

Note: Objective 4 was originally described as "To improve the link capacity and performance on Greers Road and pedestrian and cyclist safety along Langdons Road" in the PIB. However, as converting a priority intersection to a signalised intersection will always add delay to the major road, "improve" has been changed to "optimise", to reflect this whilst acknowledging the desire to limit the impact to Greers Road traffic. The part related to pedestrian and cyclist safety has been incorporated in Objective 2 as "and surrounding the intersection", with a reference to crossing safety only being removed. Note also that the project extent does not cover the full length of Langdons Road; however pedestrian and cycle safety improvements are proposed along Langdons Road in a separate project.

For brevity, in the option assessment tables, the objectives are summarised thus:

1. **Improve intersection level of service.**
2. **Improve safety for pedestrians and cyclists.**
3. **Prevent increase in rat-running trips on local roads.**
4. **Optimise capacity on Greers Road.**

These objectives will be used to assess the options developed in Section 4.

Sensitivity: General

4 OPTION ASSESSMENT

This section outlines the options considered for the project. The option development follows on from the memorandum *Testing of traffic signal controls at Greers Road / Langdons Road intersection* (TRIM 18/1284865), produced in 2018, and provides further sub-options for the treatment of the Reynolds Avenue intersection. The same option numbering has been used for consistency, with “do nothing” being labelled Option 1.

The assessment of options is undertaken against the project objectives and strategic alignment, as well as transport modelling where appropriate. To capture the potential disbenefits of the options, additional traffic volumes and re-routing for residents in the area surrounding Reynolds Avenue is also considered in the option assessment. Impacts to on-street parking supply are effectively the same for all options; therefore, parking impacts are not included in the assessment of the options. Costs and constructability are also comparable across all options and therefore do not form part of the assessment as they will not differentiate the options.

Several options were developed as follows:

- Option 1 – Do nothing (no network changes).
- Option 2 – Do minimum (increase local area traffic management).
- Option 3 – Signalise both Langdons Road and Reynolds Avenue intersections.
- Option 4 – Signalise Langdons Road intersection only. This option includes sub-options as below:
 - Option 4a – retain full movements at Reynolds Avenue
 - Option 4b – left-in/left-out at Reynolds Avenue
 - Option 4c – left-in only at Reynolds Avenue
 - Option 4d – full closure/cul-de-sac at Reynolds Avenue

The main options, Options 1 to Option 4, were identified and assessed in the 2018 memorandum, which recommended Option 4 as the preferred option, assuming Reynolds Avenue would be left-in/left-out only, although other variants were not investigated in any level of detail. This assessment repeats the assessment of the other options for completeness but introduces sub-options to Option 4 as variants for its implementation. The variants seek to manage the operational and safety risks with a priority intersection being located close to a signalised intersection.

The Option 4 variants relate to the design of the intersection of Reynolds Avenue with Greers Road. The treatment of the adjacent sections of both Langdons Road and Greers Road remain largely the same across them.

Traffic modelling

Network modelling has been completed to determine what traffic flows are expected with the Option 4 variants. The modelling scenarios include other network changes and developments, so the changes from existing are not fully due to this project but show what the outcome will be overall.

The result of the network modelling is that traffic volumes through the Langdons Road/Greers Road intersection, and along Morrison Ave and Reynolds Avenue, are expected to be comparable for all Option 4 variants. This means that the network modelling is not a determining factor between the variants. Nevertheless, there may be design aspects of the variants that do affect traffic flow, that are not captured in the network modelling. These are considered in the options assessment.

Sensitivity: General

Option Assessment Against Project Objectives

Option 1 – Do nothing

Doing nothing would retain the existing intersection configuration.



Figure 40: Existing intersection configuration

Table 9: Option Assessment – Do-nothing

Objective	Do-nothing impact
Improve intersection level of service. To improve the Level of Service at the intersection of Langdons Road and Greers Road and mitigate the increased delay for turning movements resulting from the proposed development.	Existing LoS remains; however, it will deteriorate as traffic volumes increase.
Improve safety for pedestrians and cyclists. To improve the safety for pedestrian and cyclists from increased vehicle movements at and surrounding the intersection of Langdons Road and Greers Road.	Crossing safety issues remain; however, safety will decrease as traffic volumes increase.
Prevent increase in rat-running trips on local roads. Prevent rat-running trips on local roads following increased demand from the proposed development.	Rat-running issues will remain and increase as traffic volumes and intersection delay increase.
Optimise capacity on Greers Road. To optimise link capacity and performance on Greers Road.	Greers Road performance is not impacted.
Project impact: Reynolds Avenue area traffic flows and re-routing for residents. Additional traffic volumes and re-routing for residents in the streets surrounding Reynolds Avenue.	Traffic flows will remain unchanged.

Sensitivity: General

Option 2 – Increase local area traffic management

Improvements to local area traffic management on local roads to reduce rat-running trips on local roads, including restricting the intersection of Reynolds Avenue with Greers Road to left-in/left-out only. This option has not been developed further as part of this project but is presented for completeness.

Table 10: Option Assessment – Option 2

Objective	Option 2
Improve intersection level of service. To improve the Level of Service at the intersection of Langdons Road and Greers Road and mitigate the increased delay for turning movements resulting from the proposed development.	Existing LoS remains; however, it will deteriorate as traffic volumes increase.
Improve safety for pedestrians and cyclists. To improve the safety for pedestrian and cyclists from increased vehicle movements at and surrounding the intersection of Langdons Road and Greers Road.	Crossing safety issues remains; however, safety will decrease as traffic volumes increase.
Prevent increase in rat-running trips on local roads. Prevent rat-running trips on local roads following increased demand from the proposed development.	Rat-running issues will remain and increase as traffic volumes and intersection delay increase.
Optimise capacity on Greers Road. To optimise link capacity and performance on Greers Road.	Greers Road performance is not impacted.
Project impact: Reynolds Avenue area traffic flows and re-routing for residents. Additional traffic volumes and re-routing for residents in the streets surrounding Reynolds Avenue.	Right turn movements will be re-routed, noting that the difficulty of making these turns may already be limiting the number of people making them. Both banned movements would be re-routed through Reynolds Avenue. Re-routing for the right turn in would add approximately 450 m coming from Northcote Road. Re-routing for the right turn out would add approximately 1.1 km to Harewood/Greers; however, it would be comparable travelling to Papanui Road via Langdons Road.

Sensitivity: General

Option 3 – Signalise both the Langdons Road and Reynolds Avenue intersections

New traffic signal-controlled intersections are provided at both Reynolds Avenue and Langdons Road. This option has not been developed further as part of this project but is presented for completeness.

Table 11: Option Assessment – Option 3

Objective	Option 3
Improve intersection level of service. To improve the Level of Service at the intersection of Langdons Road and Greers Road and mitigate the increased delay for turning movements resulting from the proposed development.	Improves Langdons Road LoS for right turn, adds significantly more delay to Greers Road turning traffic due to needing to coordinate movements with Reynolds Avenue.
Improve safety for pedestrians and cyclists. To improve the safety for pedestrian and cyclists from increased vehicle movements at and surrounding the intersection of Langdons Road and Greers Road.	Improves pedestrian and cycle safety, although the degree of improvement depends on signal operation, which will be at or beyond capacity.
Prevent increase in rat-running trips on local roads. Prevent rat-running trips on local roads following increased demand from the proposed development.	Encourages more through traffic to Reynolds Avenue due to intersection delays for Greers Road traffic. Delays on Greers Road are likely to push additional traffic onto other parts of the network, including Morrison Avenue.
Optimise capacity on Greers Road. To optimise link capacity and performance on Greers Road.	Significant impact to Greers Road performance due to the coordination of two closely-spaced intersections.
Project impact: Reynolds Avenue area traffic flows and re-routing for residents. Additional traffic volumes and re-routing for residents in the streets surrounding Reynolds Avenue.	No re-routing is required due to no turn restrictions. Additional traffic is likely due to being attracted by the traffic signals, and displaced traffic due to increased delay on Greers Road.

Sensitivity: General

Option 4a – Signalise Langdons Road; retain full movements at Reynolds Avenue

New traffic signals controlling the Langdons Road intersection with Greers Road. The Reynolds Avenue intersection with Greers Road remains STOP-controlled with full movements.

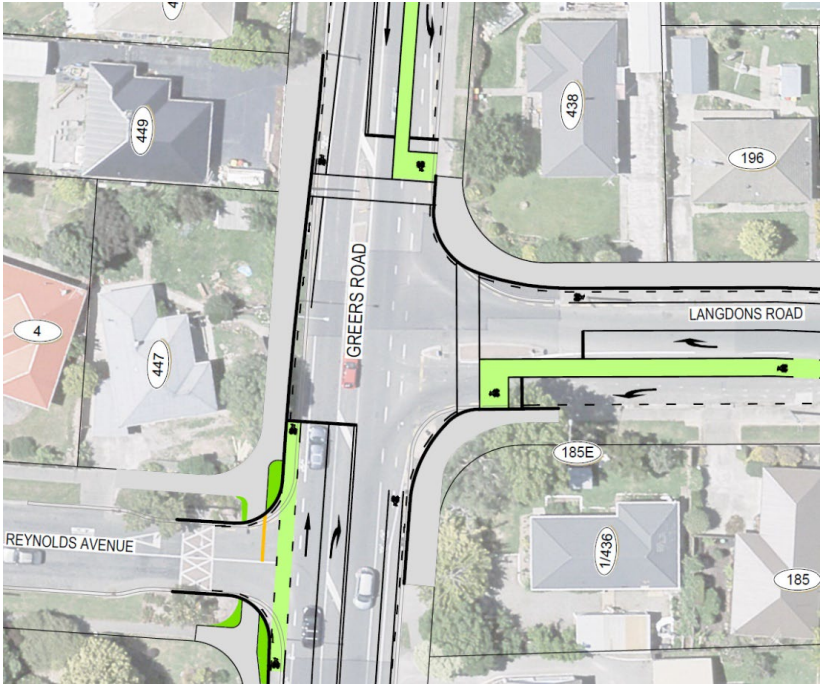


Figure 41: Option 4a

Table 12: Option Assessment – Option 4a

Objective	Option 4a
Improve intersection level of service. To improve the Level of Service at the intersection of Langdons Road and Greers Road and mitigate the increased delay for turning movements resulting from the proposed development.	Like all options to signalise the intersection of Langdons Road with Greers Road, it slightly improves the LoS for right turn movements at the intersection (amongst much higher demand). LoS for left turns remains comparable to existing. Greers Road through traffic will be delayed compared to the current priority layout, which is to be expected.
Improve safety for pedestrians and cyclists. To improve the safety for pedestrian and cyclists from increased vehicle movements at and surrounding the intersection of Langdons Road and Greers Road.	Improves pedestrian safety with signalised crossings on two legs of the intersection; a crossing on the south approach is not possible due to the limited separation from Reynolds Avenue. Improvement to cycle safety with dedicated cycle facilities on all legs; however, cyclists become at risk of being struck by vehicles turning right through queued traffic into Reynolds Avenue. There is also a risk of vehicles in a slow-moving queue turning left into Reynolds Avenue across the path of northbound cyclists.
Prevent increase in rat-running trips on local roads. Prevent rat-running trips on	Like all options to signalise the intersection of Langdons Road with Greers Road, there would be a decrease in

Sensitivity: General

local roads following increased demand from the proposed development.	<p>demand for northbound travel on Morrison Avenue (replaced by the right turn onto Greers Road at the new signals), along with an increased demand for southbound travel on Morrison Avenue due to developments and changes in the road network.</p> <p>Relatively small increases in traffic within the area surrounding Reynolds Avenue are expected due to the increased delay on Greers Road and the difficulty of making turns through traffic queued from the traffic signals.</p>
<p>Optimise capacity on Greers Road.</p> <p>To optimise link capacity and performance on Greers Road.</p>	<p>Like all options to signalise the intersection of Langdons Road with Greers Road, there is some impact to Greers Road performance due to the installation of traffic signals. This option has additional impacts due to the interaction of Reynolds Avenue traffic with Greers Road traffic: vehicles exiting Reynolds Avenue onto Greers Road are likely to disrupt traffic flow if drivers on Greers Road leave gaps during the green phase. Drivers making left-right turns out of Reynolds Avenue onto Langdons Road are likely to obstruct through traffic due to the close proximity of the intersections. Drivers waiting to turn right into Reynolds Avenue may obstruct following southbound traffic.</p>
<p>Project impact: Reynolds Avenue area traffic flows and re-routing for residents.</p> <p>Additional traffic volumes and re-routing for residents in the streets surrounding Reynolds Avenue.</p>	<p>Changes in traffic flows on Reynolds Avenue are comparable for Options 4a, 4b, 4c, 4d, with much of the change in flows driven by road network changes, including the signals adding delay to Greers Road traffic. No restriction of movements; however, queues on Greers Road will make right turns more difficult which is likely to result in some re-routing.</p>

Sensitivity: General

Option 4b – left-in/left-out at Reynolds Avenue

New traffic signals controlling the Langdons Road intersection with Greers Road. The Reynolds Avenue intersection with Greers Road remains priority-controlled and is restricted to left-in / left-out movements only.

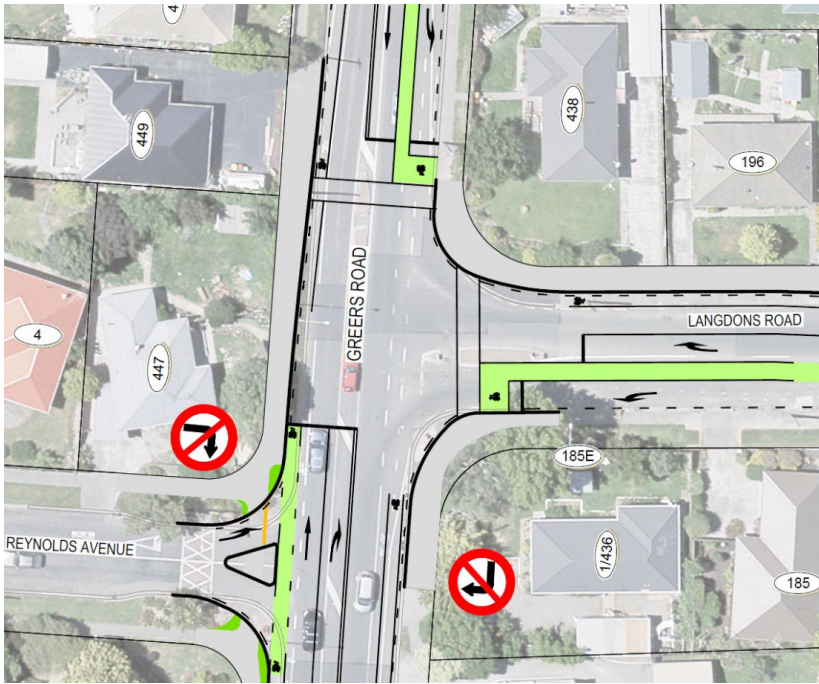


Figure 42: Option 4b

Table 13: Option Assessment – Option 4b

Objective	Option 4b
Improve intersection level of service. To improve the Level of Service at the intersection of Langdons Road and Greers Road and mitigate the increased delay for turning movements resulting from the proposed development.	Like all options to signalise the intersection of Langdons Road with Greers Road, it slightly improves the LoS for right turn movements at the intersection (amongst much higher demand). LoS for left turns remains comparable to existing. Greers Road through traffic will be delayed compared to the current priority layout, which is to be expected.
Improve safety for pedestrians and cyclists. To improve the safety for pedestrian and cyclists from increased vehicle movements at and surrounding the intersection of Langdons Road and Greers Road.	Improves pedestrian safety with signalised crossings on two legs of the intersection; a crossing on the south approach is not possible due to the limited separation from Reynolds Avenue. Improvement to cycle safety with dedicated cycle facilities on all legs and the removal of right-turn conflicts. There is a risk of vehicles in a slow-moving queue turning left into Reynolds Avenue across the path of northbound cyclists.
Prevent increase in rat-running trips on local roads. Prevent rat-running trips on	Like all options to signalise the intersection of Langdons Road with Greers Road, there would be a decrease in demand for northbound travel on Morrison Avenue

Sensitivity: General

local roads following increased demand from the proposed development.	(replaced by the right turn onto Greers Road at the new signals), along with an increased demand for southbound travel on Morrison Avenue due to developments and changes in the road network. Relatively small increases in traffic within the area surrounding Reynolds Avenue are expected due to the increased delay on Greers Road and the banned right turns.
Optimise capacity on Greers Road. To optimise link capacity and performance on Greers Road.	Like all options to signalise the intersection of Langdons Road with Greers Road, there is some impact to Greers Road performance due to the installation of traffic signals. This option has additional impacts due to the interaction of Reynolds Avenue traffic with Greers Road traffic: vehicles exiting Reynolds Avenue onto Greers Road are likely to disrupt traffic flow if drivers on Greers Road leave gaps during the green phase. Drivers making left-right turns out of Reynolds Avenue onto Langdons Road are likely to obstruct through traffic due to the close proximity of the intersections.
Project impact: Reynolds Avenue area traffic flows and re-routing for residents. Additional traffic volumes and re-routing for residents in the streets surrounding Reynolds Avenue.	Right turn movements will be re-routed, noting that the difficulty of making these turns may already be limiting the number of people making them. Both banned movements would be re-routed through Reynolds Avenue. Re-routing for the right turn in would add approximately 450 m coming from Northcote Road. Re-routing for the right turn out would add approximately 1.1 km to Harewood/Greers; however, it would be comparable travelling to Papanui Road via Langdons Road.

Sensitivity: General

Option 4c – left-in only at Reynolds Avenue

New traffic signals controlling the Langdons Road intersection with Greers Road. The Reynolds Avenue intersection with Greers Road is changed to a left-in only and is not signalised.

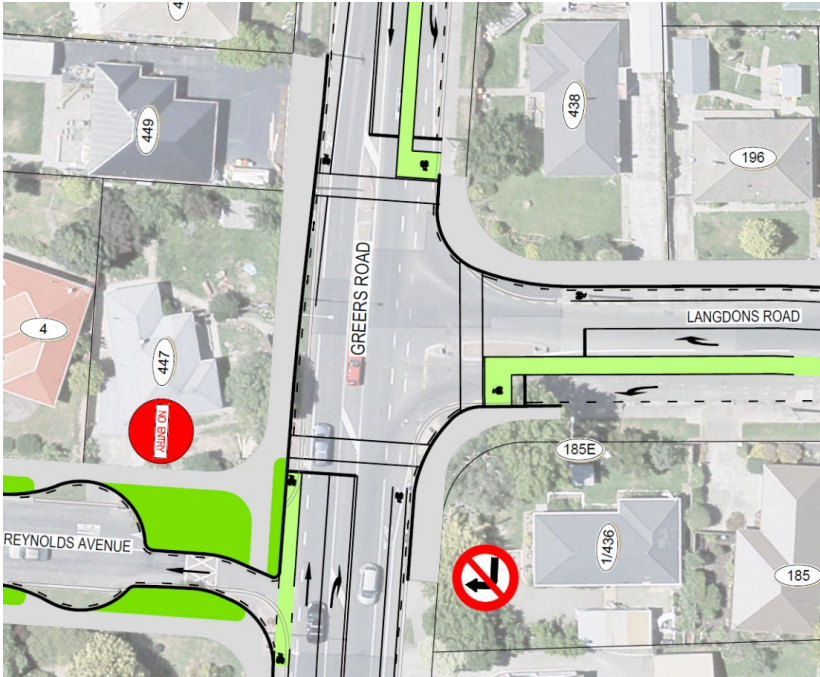


Figure 43: Option 4c

Table 14: Option Assessment – Option 4c

Objective	Option 4c
Improve intersection level of service. To improve the Level of Service at the intersection of Langdons Road and Greers Road and mitigate the increased delay for turning movements resulting from the proposed development.	Like all options to signalise the intersection of Langdons Road with Greers Road, it slightly improves the LoS for right turn movements at the intersection (amongst much higher demand). LoS for left turns remains comparable to existing. Greers Road through traffic will be delayed compared to the current priority layout, which is to be expected.
Improve safety for pedestrians and cyclists. To improve the safety for pedestrian and cyclists from increased vehicle movements at and surrounding the intersection of Langdons Road and Greers Road.	Improves pedestrian safety with signalised crossings on all three legs of the intersection. Improvement to cycle safety with dedicated cycle facilities on all legs. All active modes users benefit from fewer conflict points and no right turn conflicts at the Reynolds Avenue intersection. There is a risk of vehicles in a slow-moving queue turning left into Reynolds Avenue across the path of northbound cyclists.
Prevent increase in rat-running trips on local roads. Prevent rat-running trips on local roads following increased demand from the proposed development.	Like all options to signalise the intersection of Langdons Road with Greers Road, there would be a decrease in demand for northbound travel on Morrison Avenue (replaced by the right turn onto Greers Road at the new

Sensitivity: General

	<p>signals), along with an increased demand for southbound travel on Morrison Avenue due to developments and changes in the road network.</p> <p>Relatively small increases in traffic within the area surrounding Reynolds Avenue are expected due to the increased delay on Greers Road and the banned turns.</p>
<p>Optimise capacity on Greers Road. To optimise link capacity and performance on Greers Road.</p>	<p>Like all options to signalise the intersection of Langdons Road with Greers Road, there is some impact to Greers Road performance due to the installation of traffic signals. The impact of Reynolds Avenue will be limited to left-turning traffic slowing following vehicles; however, the addition of the pedestrian crosswalk on the south side increases overall intersection delay in the AM peak.</p>
<p>Project impact: Reynolds Avenue area traffic flows and re-routing for residents. Additional traffic volumes and re-routing for residents in the streets surrounding Reynolds Avenue.</p>	<p>Right turn and the left-out movements will be re-routed, noting that the difficulty of making the right turns may already be limiting the number of people making them. Both banned movements would be re-routed through Reynolds Avenue. Re-routing for the right turn in and left turn out would add approximately 450 m coming to/from Northcote Road via Reynolds Avenue onto Sawyers Arms Road, or 850 m via Highsted Road. Re-routing for the right turn out would add approximately 1.1 km to Harewood/Greers; however, it would be comparable travelling to Papanui Road via Langdons Road.</p>

Sensitivity: General

Option 4d – full closure/cul-de-sac at Reynolds Avenue

New traffic signals controlling the Langdons Road intersection with Greers Road. The Reynolds Avenue intersection with Greers Road is replaced with a cul-de-sac on Reynold Avenue.

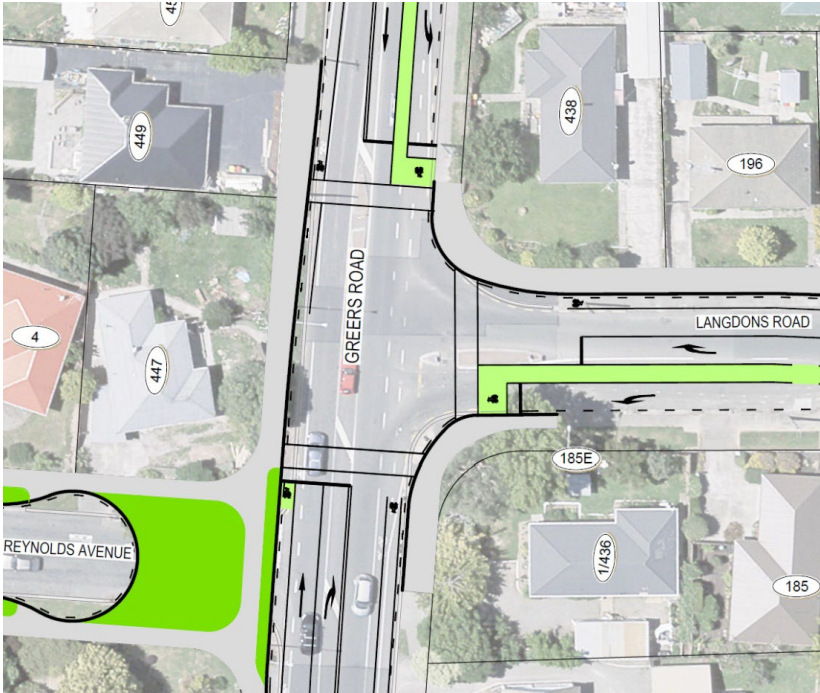


Figure 44: Option 4d

Table 15: Option Assessment – Option 4d

Objective	Option 4d
Improve intersection level of service. To improve the Level of Service at the intersection of Langdons Road and Greers Road and mitigate the increased delay for turning movements resulting from the proposed development.	Like all options to signalise the intersection of Langdons Road with Greers Road, it slightly improves the LoS for right turn movements at the intersection (amongst much higher demand). LoS for left turns remains comparable to existing. Greers Road through traffic will be delayed compared to the current priority layout, which is to be expected.
Improve safety for pedestrians and cyclists. To improve the safety for pedestrian and cyclists from increased vehicle movements at and surrounding the intersection of Langdons Road and Greers Road.	Improves pedestrian safety with signalised crossings on all three legs of the intersection. Improvement to cycle safety with dedicated cycle facilities on all legs. All active modes users benefit from the removal of conflicts at the Reynolds Avenue intersection.
Prevent increase in rat-running trips on local roads. Prevent rat-running trips on local roads following increased demand from the proposed development.	Like all options to signalise the intersection of Langdons Road with Greers Road, there would be a decrease in demand for northbound travel on Morrison Avenue (replaced by the right turn onto Greers Road at the new signals), along with an increased demand for southbound

Sensitivity: General

	<p>travel on Morrison Avenue due to developments and changes in the road network.</p> <p>Relatively small increases in traffic within the area surrounding Reynolds Avenue are expected due to the increased delay on Greers Road and the banned right turns.</p>
<p>Optimise capacity on Greers Road. To optimise link capacity and performance on Greers Road.</p>	<p>Like all options to signalise the intersection of Langdons Road with Greers Road, there is some impact to Greers Road performance due to the installation of traffic signals. Apart from that, this option has no interaction between Greers Road and Reynolds Avenue traffic. The addition of the pedestrian crosswalk on the south side increases overall intersection delay in the AM peak.</p>
<p>Project impact: Reynolds Avenue area traffic flows and re-routing for residents. Additional traffic volumes and re-routing for residents in the streets surrounding Reynolds Avenue.</p>	<p>All turning movements will be re-routed, noting that the difficulty of making the right turns may already be limiting the number of people making them. All banned movements would be re-routed through Reynolds Avenue. Re-routing for the right turn in and left turn out would add approximately 450 m coming to/from Northcote Road via Reynolds Avenue onto Sawyers Arms Road, or 850 m via Highsted Road. Re-routing for the right turn out would add approximately 1.1 km to Harewood/Greers; however, it would be comparable travelling to Papanui Road via Langdons Road. Re-routing for the left-turn in would also add approximately 1.1 km to Harewood/Greers; however, it is likely that some drivers would re-route via Farrington Avenue instead of Greers Road, reducing the additional distance.</p>

Sensitivity: General

Summary of Safe System Assessment

A Safe System Assessment (SSA) of Options 4b, 4c, and 4d has been completed. Assessments of Options 2 and 3 have not been completed as designs have not been developed for these options, noting that they perform poorly against the project objectives. Likewise, whilst a design of Option 4a has been developed, this has been determined to have poor outcomes in several areas and is not recommended to be progressed further.

Table 16: SSA scores for assessed options

Assessment scenario	Overall SSA score
Option 1 (do nothing)	210
Option 4b (Reynolds left-in/left out)	150
Option 4c (Reynolds left-in/left out)	143
Option 4d (Reynolds cul-de-sac)	132

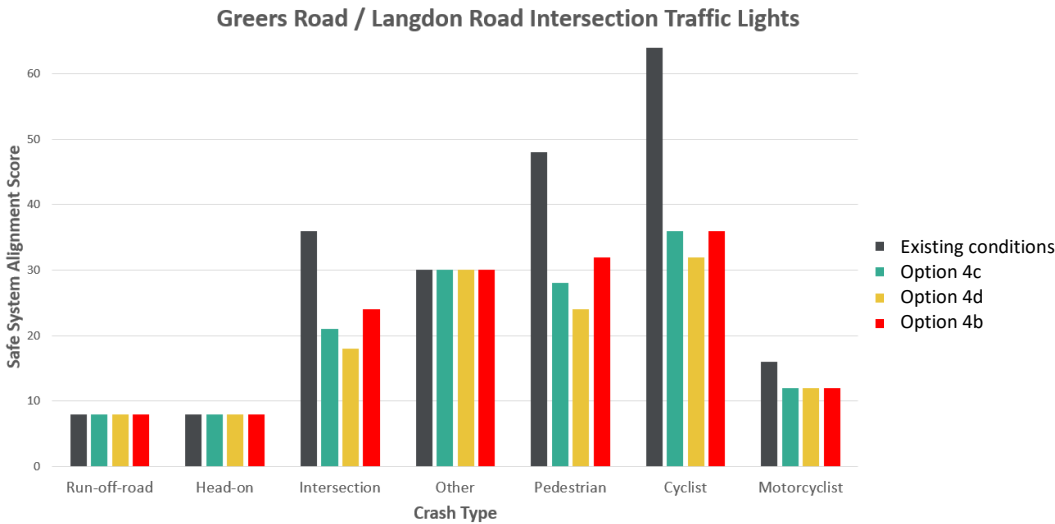


Figure 45: SSA score summary chart

As seen in Table 16, all options improve the overall safety of the intersection due to the signalisation. Figure 45 shows safety relating to most crash types improves, whilst several remain unchanged. It is noted, however, that in most cases there are factors that both increase and decrease the scores.

Between the project options, the scores improve as the level of turning restrictions increases, which is also a reflection of the signalised crosswalk provided on the south approach with Options 4c and 4d.

Sensitivity: General

Option assessment summary

The options assessment tests the options against the objectives and potential impacts of the project using a comparative assessment (rankings shown below).

Comparative Assessment Outcomes	
✓✓	Highly contributes to achieving the desired outcome
✓	Contributes to achieving the desired outcome
-	Could detract from achieving the desired outcomes but can be managed through design
x	Detracts from achieving the desired outcome
xx	Significantly detracts from achieving the desired outcome

The options have been assessed based on their performance against the project objectives, detailed in Table 4 through to Table 10. The outcome of this is present in Table 11, below:

Table 17: Option Assessment Summary

Objective	Do nothing	Opt 2	Opt 3	Opt 4a	Opt 4b	Opt 4c	Opt 4d
Improve intersection level of service. To improve the Level of Service at the intersection of Langdons Road and Greers Road and mitigate the increased delay for turning movements resulting from the proposed development.		-	✓	✓	✓	✓	✓
Improve safety for pedestrians and cyclists. To improve the safety for pedestrian and cyclists from increased vehicle movements at and surrounding the intersection of Langdons Road and Greers Road.		-	✓	✓	✓	✓✓	✓✓
Prevent increase in rat-running trips on local roads. Prevent rat-running trips on local roads following increased demand from the proposed development.		-	x	-	-	-	-
Optimise capacity on Greers Road. To optimise link capacity and performance on Greers Road.		✓✓	xx	x	x	-	-
Project impact: Reynolds Avenue area traffic flows and re-routing for residents. Additional traffic volumes and re-routing for residents in the streets surrounding Reynolds Avenue.		✓	-	-	-	x	x

Sensitivity: General

As seen in Table 11, Option 4c (left-in only at Reynolds Avenue) and Option 4d (cul-de-sac of Reynolds Avenue) perform the best against the project objectives. However, these options also have the greater impacts to access for residents in the area surrounding Reynolds Avenue. The SSA, considering the safety of all road users, rated Option 4d as the safest option, followed by Option 4c.

The full cul-de-sac in Option 4d provides slightly better outcomes than the left-in only treatment in Option 4c but also has slightly greater impacts to residents. However, these differences were not great enough to substantially differentiate the options.

In considering how the options address the crashes observed at the site, the greatest benefit is seen from the banning of right turn movements at the intersection of Greers Road and Reynolds Avenue and from the provision of better pedestrian crossing facilities, particularly with Options 4c and 4d. The loss of control crashes may not be resolved by the signals, although the central refuge island is being removed, which removes the struck object. The incidence of rear-end crashes is expected to increase with the installation of the traffic signals, particularly for Greers Road traffic, although these crashes are typically of low severity.

Based on this assessment and the SSA, progressing Option 4d is recommended. Option 4c is also considered to provide a good outcome and could be considered a fallback if Option 4d could not be implemented. However, due to concerns that both Options 4c and 4d may be unacceptable to residents, it has been agreed that Option 4b (left-in/left-out only at Reynolds Avenue) will be presented for community feedback alongside the preferred Option 4d. Whilst Option 4b has poorer outcomes against the project objectives, including in the areas of traffic impacts and safety and connectivity for active mode users, it still provides benefits over the existing scenario. To avoid seeking community feedback on multiple options with little differentiation between them, Option 4c will not be taken to consultation. However, as a combination of Options 4b and 4d, there is the potential for it to emerge as a preferred option following community feedback.

5 PREFERRED OPTION

5.1 Introduction and Outcomes

Whilst two options, 4b and 4d, are being progressed to community consultation, the majority of the design is consistent between the two options, with the difference being limited to the treatment of the Reynolds Avenue intersection, the signalised pedestrian and cycle crossing over the south approach of Greers Road, and the associated shared path connections around the intersection.

As the preferred option, Option 4d allows for the safest and most efficient operation of Greers Road by removing all interaction with traffic on Reynolds Avenue. It also provides the safest and best-connected option for people walking and cycling. It does, however, restrict all vehicle movements in and out of Reynolds Avenue from Greers Road. Although turning volumes are not high, this would result in re-routing for residents, including requiring right turns onto roads such as Highsted Road and Sawyers Arms Road from within the local area. Additional no stopping lines around these intersections is recommended but not included in the current scheme design.

Option 4b maintains left turns in and out of Reynolds Avenue from Greers Road. The operational efficiency of Greers Road would likely be impacted as northbound drivers wait on the green signal, allowing others to enter the stream of traffic from Reynolds Avenue. It would also likely be affected by drivers trying to make the short left-right movement into Langdons Road obstructing northbound traffic if not able to enter the right turn lane fully. There is also a crash risk associated with this if drivers turn through queued straight through traffic on Greers Road whilst the right turn phase is operating.

Right turns would present a much greater safety risk due to turns through queued traffic and would be difficult to undertake due to the replacement of the flush median with a right turn bay. Nevertheless, right turns are not physically prevented with Option 4b, and are likely to illegally occur to some degree.

5.2 Design Guidance and References

- Traffic Control Devices Manual.
- AUSTROADS – Guide to Road Design Part 4: Intersections and Crossings.
- AUSTROADS – Guide to Road Design Part 4A: Unsignalised and Signalised Intersections.
- AUSTROADS – Guide to Road Design Part 6A: Pedestrian and Cyclist Paths.
- AUSTROADS – Guide to Traffic Management Part 6: Intersections, Interchanges and Crossings
- AUSTROADS – Guide to Traffic Management Part 9: Traffic Operations
- AUSTROADS – Guide to Traffic Management Part 10: Traffic Control and Communication Devices
- Land Transport Rule: Traffic Control Devices 2004 and amendments.
- Christchurch City Council – Infrastructure Design Standard
- Christchurch City Council – Cycle Design Guide
- Cycling Network Guidance – the Transport Agency’s guideline for cycling planning and design²

² <http://nzta.govt.nz/cng>

Sensitivity: General

- Pedestrian Network Guidance – the Transport Agency’s guideline for pedestrian planning and design³

5.3 Key Features

Geometric Design

Whilst two options, 4b and 4d, are being progressed to community consultation, the bulk of the design is consistent between them, with the difference being limited to the treatment of the Reynolds Avenue intersection, the signalised pedestrian and cycle crossing over the south approach of Greers Road and the associated shared path connections around the intersection. The common parts of the design will be described for both options, with the elements specific to each option described separately.

Traffic lane and path widths are as detailed on the scheme design drawings. Continuous cycle lanes are provided throughout the extent of the project, connecting the existing cycle lanes on Greers Road through to Harewood Road and adding new cycle lanes within the extent of works on Langdons Road.

The Greers Road north approach provides dedicated lanes for all vehicle movements and for people cycling, noting that cyclists turning left into Langdons Road would do so from the left-turn traffic lane, or by accessing an advance stop box from the cycle lane. A shared path allows the signals to be bypassed by riders. Rigid trucks can complete the left turn from within the kerbside lane, whilst semi-trailers/B-trains/truck and trailer units would need to occupy the cycle lane to do so. This allows the intersection to be kept as small as possible, reducing crossing distances, and avoids introducing a large lateral shift for southbound through traffic. From conversations with local businesses, it is understood that most large delivery vehicles turn right into Langdons Road from the south.

The Greers Road south approach provides dedicated lanes for all vehicle movements and for people cycling. Advance stop boxes provide for confident cyclists to turn right into Langdons Road. Road widening on the western side of Greers Road is required to accommodate the width of the lanes and to reduce the lateral shift to an appropriate level for southbound through traffic.

The cycle lanes extend to Harewood Road in both directions, including filling in the gap in the northbound facility between Harewood Road and Reynolds Avenue. This creates continuous cycle lanes on Greers Road in both directions from Harewood Road around onto Northcote Road, almost to Main North Road. The flush median is also extended between the Harewood Road and Langdons Road intersections, providing additional stacking space for vehicles turning right at the signals, as well as for vehicles turning right into Bainton Street and Hoani Street

The Langdons Road approach provides dedicated lanes for all vehicle movements and for people cycling. Advance stop boxes connected to the cycle lane provide for confident cyclists to turn onto Greers Road in both directions. A shared path allows the signals to be bypassed by riders turning left. Rigid trucks can complete the left turn onto Greers Road from within the kerbside lane, whilst semi-trailers/B-trains/truck and trailer units would need to occupy the cycle lane to do so. The cycle and traffic lane widths are designed to accommodate this. This allows the intersection to be kept as small as possible, reducing crossing distances. The largest number of movements of the larger trucks are from Pak n Save, two to four per day, which typically occur before 7 am and around the middle of the day.

³ <http://nzta.govt.nz/png>

Sensitivity: General

The dedicated left and right turn lanes on Langdons Road extend the length of the 95 percentile modelled queues. This requires road widening on the northern side and the replacement of the existing deep dish channel with kerb and flat channel on the southern side. Cycle lanes are provided within these extents.

The key difference of the signalised intersection design between the two options is that Option 4d allows a pedestrian and cycle crosswalk over the south approach of Greers Road, adjacent to the intersection with Reynolds Avenue. This crosswalk has little impact on the efficiency of the intersection; there would be a little additional delay in the morning peak and no difference in the evening peak, which is the critical case with much higher traffic volumes. The provision of the crosswalk improves connectivity for people walking and allows a cycle connection that caters for less-confident riders and improves the connectivity between Reynolds Avenue and Langdons Road. In conjunction with this, shared paths can be provided around much of the intersection to facilitate this cycle connectivity. A shared path on the western side of the intersection is not proposed due to the limited space available and the conflict with pedestrians that this would create.

Construction

The widening of Harewood Road and Greers Road will require new shoulder construction. The installation of the traffic signals requires a higher level of skid resistance on the approaches, which are unlikely to be met by the current surfacing. The design assumes full-depth shoulder reconstruction across the outer lanes on the approaches, to achieve adequate crossfalls and replace fatigued pavement, and through the centre of the intersection to replace fatigued pavement between the adjacent shoulder reconstruction. Resurfacing with asphalt on the approaches and within the intersection and chipseal on Langdons Road is expected to improve skid resistance, avoid the issue of ghost pavement markings, and provide a higher standard finish to the intersection upgrade. As pavement testing has not yet been completed, the extent and design of pavement improvements is to be determined during detailed design.

Landscaping and trees

The removal of two street trees (one *Styraciflua* (Sweetgum) and one *Pendula* (Silver Birch)) on the southwest corner of the intersection is required due to the road widening to accommodate the swept paths of heavy vehicles and maintain a footpath. Significant trimming would have been required to provide visibility to the traffic signals. The opportunity has been taken, following the need to remove the trees, to widen the path to create a wider shared use path. Four replacement trees are proposed at the nearest suitable location, on Reynolds Avenue, subject to the confirmation of the location of underground services and agreement with adjacent landowners.

Medium size exotic deciduous trees (such as *Magnolia* or *Maple*) are proposed as replacements.

Traffic signs and road markings

The proposal shows all centre lines, lane lines and limit lines. The no stopping is shown as required. This allows consultation and traffic resolutions to be completed. For simplicity, signs are not shown, except for the purpose of showing turn restrictions.

Effects on parking

On Greers Road, all on-street parking is removed within the extent of the intersection approaches, and on the western side between Reynolds Avenue and Harewood Road. This equates to approximately 28 spaces being removed, with a parking survey identifying demand is typically less than 10 vehicles, but increasing to 23 at 3 pm, corresponding with the school pick-up. The existing

Sensitivity: General

parking demand would be displaced onto Bainton Street, Hoani Street, Reynolds Avenue (depending on the option and where people are travelling to and from), further north on Greers Road, and onto private properties, where possible.

On Langdons Road, all on-street parking is removed within the extent of the intersection approach. This equates to approximately 27 spaces being removed, with a parking survey identifying demand peaked at 12 vehicles in the early afternoon, up from 4-5 at 7 am and 5:30 pm. This parking would be displaced further along Langdons Road or onto private properties, where possible.

On Reynolds Avenue, on-street parking is removed around the cul-de-sac head in Option 4d. A total of five spaces are removed, with a parking survey identifying demand of up to two vehicles for an area extending further from the intersection. This indicates that the existing parking demand can be met, although some people may need to park a litter further away than desired. Option 4b does not impact on-street parking on Reynolds Avenue.

Traffic Signal Phasing

Traffic signal phasing has been developed for both options, the difference being the provision of a pedestrian and cycle crosswalk on the south approach with Option 4d. These are presented in Figure 46 and Figure 47. Note this intersection will be linked to the Harewood Road intersection to coordinate progression along Greers Road during peak periods.

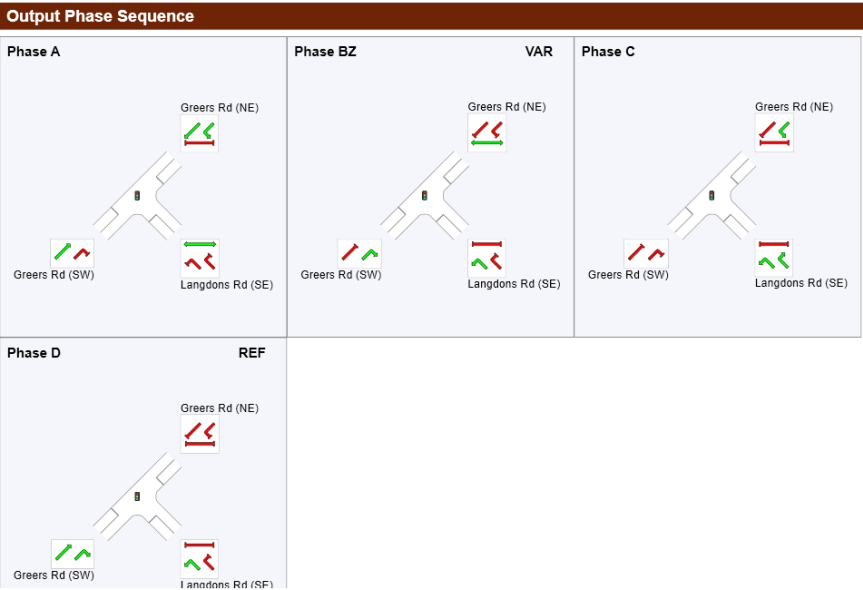


Figure 46: Proposed traffic signal phasing - Option 4b (note: the left turn into Langdons Road will not operate during Phase C due to the conflict of large vehicles with the right turn out movement)

Sensitivity: General

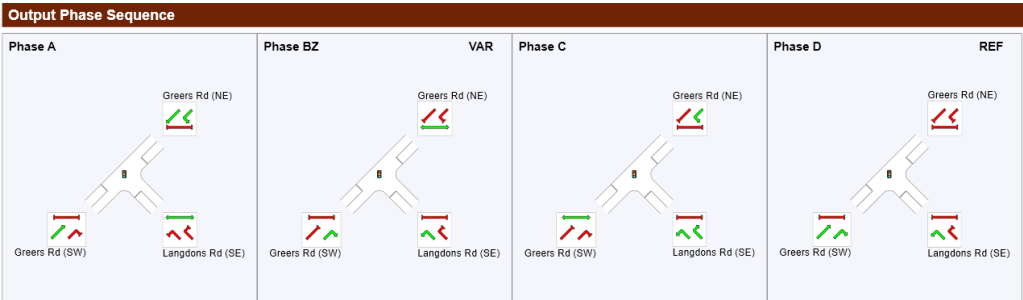


Figure 47: Proposed traffic signal phasing - Option 4d (note: the left turn into Langdons Road will not operate during Phase C due to the conflict of large vehicles with the right turn out movement)

Vehicular tracking

Vehicle tracking has been undertaken for the RTS-18 semi-trailer as the design vehicle for right-turn movements in and out of Langdons Road. For left-turn movements, it is the check vehicle, as discussed in the Geometric Design section. The RTS-18 tour coach is the design vehicle for these movements. Movements in and out of Reynolds Avenue are designed for the RTS-18 medium rigid truck.

Sight distance/visibility splays

The straight nature of all approaches provides good visibility to the signalised intersection, with the only obstruction to the signals being from the trees on the Langdons Road approach, that need to be removed for the road widening, and utility poles, that need to be undergrounded.

At Reynolds Avenue, the existing give way control is changed to a stop control in Option 4b, due to the visibility being impacted as the lanes are pushed closer to property fences.

5.4 Transport Impacts

Traffic Modelling

The installation of the traffic signals increases delay to through traffic on Greers Road, which previously had priority over Langdons Road traffic. Right turn delays are reduced, whilst the delay generally decreased for Langdons Road traffic, especially the right turn out.

With weekday traffic volumes in the order of 19,000 VPD, there is little spare capacity on Greers Road. The Greers Road/Sawyers Arms Road/Northcote Road intersection upgrade is expected to reduce traffic volumes on Greers Road, particularly in the southbound direction. However, this project is not programmed to be completed until after the Langdons Road/Greers Road signals are constructed. This will result in notably greater delays to Greers Road traffic in the interim period.

5.5 Meeting the objectives and alignment with wider strategy

Alignment with objectives

The proposal achieves the project objectives, noting, however, that the intersection level of service will be low until the Greers Road/Sawyers Arms Road/Northcote Road intersection upgrade is completed.

Sensitivity: General

It should be noted that, whilst northbound traffic volumes on Morrison Avenue are expected to reduce due to the right turn onto Greers Road from Langdons Road being easier due to the traffic signals, southbound traffic volumes on Morrison Avenue are expected to increase. This is due to increased delay on Greers Road. However, these volumes expected to decrease following completion of the Greers Road/Sawyers Arms Road/Northcote Road intersection upgrade as traffic volumes on Greers Road decrease and the right turn onto Greers Road from Sawyers Arms Road becomes an easier.

5.6 Asset Management Considerations

Stormwater

The proposal does include any upgrades to the stormwater services. Relocation of catchpits and kerb and channel will be required due to the road widening and relocation of low points. The portion of the dish channel on Langdons Road is required to be replaced.

A high-level stormwater assessment has been undertaken to identify the impacts of the proposed Greers Road / Langdons Road / Reynolds Ave intersection layouts on the existing stormwater network and flood risk. This assessment has been based on publicly available information from Land Information New Zealand (LINZ) and Christchurch City Council (CCC).

An initial site visit was undertaken as part of the scheme development. Flood complaints near the intersection have been received from CCC. The flood complaints are as follows:

- Received 12 February 2022 – “Flooding whole street above crown of the road. Bainton Street also flooded similar above crown of road. This has half covered the west half of Greers Road. Send maintenance contractor asap”
- Received 21 July 2022 – “Extensive flooding”

The existing stormwater infrastructure at the intersection is annotated in Figure 48 below. A 600 mm diameter stormwater pipe runs along the north-west side of Greers Road, flowing north. This pipe services houses via lateral connections, as well as sumps located in the road channels.

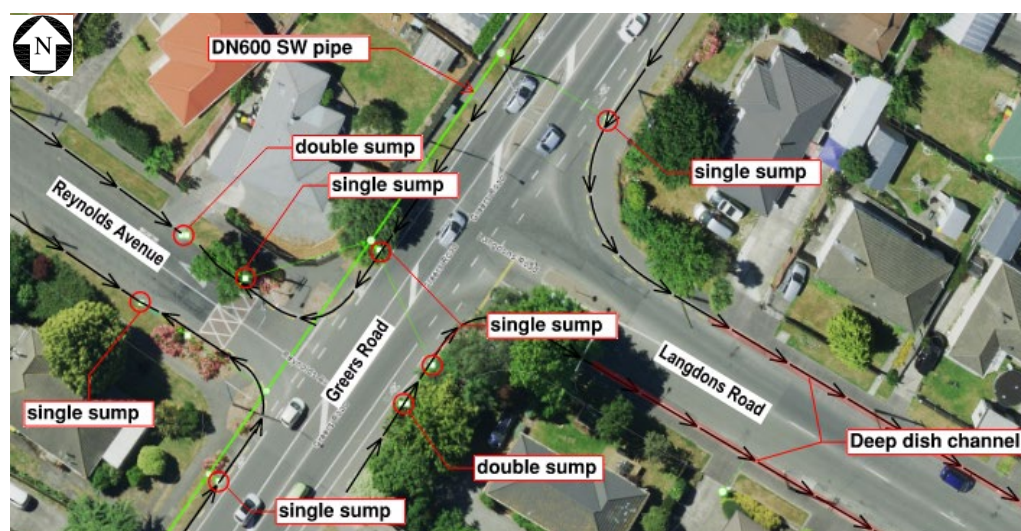


Figure 48. Existing stormwater infrastructure (from CCC Three Waters GIS)

Sensitivity: General

The intersection is within the predicted flood extent for a 200-year storm event as well as within a flood management area, as shown in Figure 49. This indicates the level of service of the existing stormwater network may be below the CCC standard.



Figure 49. Predicted 200-year flood extent (blue) and flood management area (pink hatch) (from CCC Floor Level Viewer)

The latest LINZ LIDAR for Christchurch shows the kerb and channels on Greers Road fall towards low points at the intersections with Reynolds Avenue and Bainton Street. The road crown on Greers Road falls towards the low point at Reynolds Ave from Harewood Road (to the south) and from the midblock crossing outside Bishopdale School (to the north). The surrounding area and wider catchment generally fall to the east from Highsted Road (to the west), with the crown of Greers Road acting as a sub-catchment boundary.

Indicative sub-catchments for the west side of Greers Road are shown in Figure 50 below.

Sensitivity: General



Figure 50. Sub-catchments based on LIDAR information (imagery from CCC Three Waters GIS)

An assessment of the overland flow on the west side of Greers Road indicates:

- When the surface water ponding depth at Bainton Street on the west side of Greers Road reaches the highest point in the kerb and channel between Bainton Street and Reynolds Ave, surface water will overflow to the Reynolds Ave low point.
- When the surface water ponding depth on Reynolds Ave reaches the lowest point on the Greers Road crown (between Reynolds Ave and Langdons Road), surface water will overflow onto Langdons Road.

Sensitivity: General

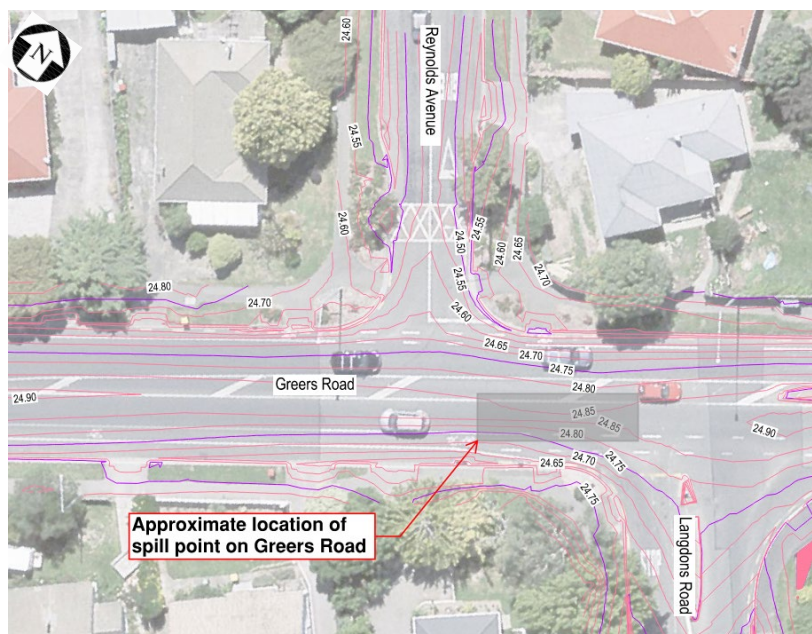


Figure 51. Existing contours at the Reynolds Avenue / Greers Road / Langdons Road intersection, generated from 3D strings in the CCC Survey (Dated 24.02.2023. Levels in Christchurch Drainage Datum 2019)

The LIDAR and survey information shows the lowest point on the Greers Road crown is higher than the level of the property boundaries on the west side of Greers Road at the intersection of Reynolds Ave (Figure 1-4). This means that:

- When the capacity of the stormwater pipe network on the west side of Greers Road is exceeded, surface water will cross the property boundaries prior to spilling over the road crown onto Langdons Road.
- Any displacement or reduction in available surface water volume at the intersection with Reynolds Ave will increase the risk of surface water crossing the property boundaries.

As the low point is on Reynolds Ave, obstructions to the overland flow path from Greers Road onto Reynolds Ave can increase the surface water elevation upstream of the obstruction, creating an additional risk where surface water may cross the property boundaries. This means that where full height kerbs and/or raised tables are incorporated in the layout (e.g. for a road closure option or left in only option), channels will need to be retained to convey surface water flows on to Reynolds Ave at least up to the 10-year design event. In this case, we recommend the below measures are incorporated in the layout in the next design phase:

Installing the cycle connections to Reynolds Ave at road level so they can function as overland flow paths for both options.

The top of the raised table needs to be set at a level to allow for overland flow over the raised table and below the level of the adjacent property boundaries.

Re-grade Greers Road at the intersection with Reynolds Ave to allow overland flow from Bainton Street to flow into the kerb and channels on both sides of Reynolds Ave.

Sensitivity: General

Ensure that the flood volume displacement is zero at the intersection (or provide additional surface water storage capacity) as part of the design, for example by lowering the area within the kerbed closure at the intersection with Reynolds Ave.

There may be the potential to lower the spill level on Greers Road by re-grading the southbound lane to shift the crown to the centreline of the road.

An assessment of the overland flow on the east side of Greers Road indicates that surface water can flow onto Hoani Street and Langdons Road. These overland flow paths should be retained as part of the design.

The option to provide a raised table(s) on Greers Road would raise the lowest point on the Greers Road crown, which has the potential to raise surface water levels on the west side of Greers Road prior to surface water spilling over the road crown. As this increases the likelihood and extent of surface water crossing the property boundaries, we do not recommend progressing with a raised table option on Greers Road.

Wastewater

The proposal does not include any upgrades to the wastewater services.

Water supply

The proposal does not include any upgrades to the water supply services.

Street lighting

A Lighting Assessment by Connetics is underway at the time of writing.

Existing Underground Services

Underground services, including Council three-waters assets, power, and communications cables, currently exist throughout the project extents. Location of services by Ground Penetrating Radar (GPR) has been completed for the area surrounding the Langdons Road/Greers Road intersection. Further investigation is required during detailed design into the exact location and depth of services, with any conflicts to be addressed. An allowance for this has been made in the cost estimate.

Undergrounding Overhead Services

There are overhead services in this location on both Langdons Road and Greers Road. These will need to be removed and the cables undergrounded due to road widening, visibility to traffic signals, and conflict with high vehicles due to road crossfall where the lanes will be in close proximity to the poles.

5.7 Ongoing Maintenance

The scheme includes efficient design for drainage and landscaping to provide easy cleaning and maintenance during the design life.

Landscaping and berms will need to be maintained. Trees would need to be trimmed to maintain maximum visibility of the traffic signals.

The traffic signals will require ongoing maintenance.

Sensitivity: General

5.8 Property Impacts

Land ownership

The scheme is provided within the existing road corridors and no land is required to provide the changes to the network.

During the design it has emerged that the boundary fence at No. 438 Greers Road encroaches the road reserve by up to 1.4 m. At this location the road is being widened to allow the turning lanes and vehicle tracking, so there would be insufficient width to accommodate the footpath and traffic signal pole within the space between the proposed kerb and existing fence. It also restricts visibility around the bend between path users. Therefore, the fence will need to be relocated back to the legal boundary.



5.9 Statutory considerations

Consent Issues

A planning needs assessment has been completed during the optioneering phase of scheme design, concluding that no new or separate consents are required, allowing existing global consents to be utilised. This will be reviewed and updated if necessary during detailed design.

Bylaw Changes and Traffic Controls

A number of traffic resolutions will need to be amended and require Council approval through the approval process. All traffic controls will be resolved at the time of approval also.

The Cycle lanes will need to be added to the register of Special Vehicle Lanes in the Christchurch Traffic and Parking Bylaw.

5.10 Cost Estimates

The confirmed CPMS/SAP budget in the brief is \$2.0 M.

The draft cost estimate for the project is as follows:

Option 4B: \$2.37 M

Sensitivity: General

Option 4D: \$2.36 M

This estimate is subject to review of the schedule rates against current market rates. It includes a 25% contingency and ancillary works, including power undergrounding, totalling \$0.48 M. This is an estimate, subject to an assessment and design being completed by Connetics.

The estimate allows for items such as mill and mix on the intersection approaches for skid resistance, relatively extensive amounts of shoulder construction associated with the road widening, and deep-lift asphalt through the intersection. This reflects a worst-case, but quite likely, scenario of the extents of pavement construction. Replacement of stormwater assets that will become in the roadway due to the road widening has been allowed for. The need for this will be confirmed as part of further investigations during detailed design; concrete capping of the existing pipes may be adequate.

5.11 Safe System Audit

A scheme safe system audit has been carried out on Options 4b, 4c, and 4d. The designer's responses have been sent back to the Audit Team and Safety Engineer.

5.12 Risks

The aspects of the scheme have been identified as the key risks:

- Traffic impacts of the new signalised intersection (particularly until such time as the Greers Road/Sawyers Arms Road/Northcote Road upgrade is completed.
- The banning of turning movements at the intersection of Reynolds Avenue with Greers Road.
- The removal of on-street parking on Greers Road and Langdons Road.
- Cost risks associated with utilities and pavement, which are typically not fully understood at scheme stage.

Sensitivity: General

6 CONSULTATION OUTCOMES

Community Views and Preferences Ngā mariu ā-Hāpori

Public Consultation Te Tukanga Kōrerorero

- 1.1 Early engagement started in May 2023. Key stakeholders (47), and residents impacted by on-street parking (21) either via emails, phone calls, or in-person meetings.
- 1.2 At early meetings with FENZ, NZ Police, St Johns, Spokes, AA, Northlink Property Manager, Northlands Mall Property Manager, Bishopdale School, and Papanui Preschool and Nursery, staff shared draft plans seeking early feedback. This feedback led to changes to lane widths, and on-street parking in the final plans. It was also decided at this stage that design two options would be most appropriate for consultation.
- 1.3 Consultation started on Wednesday 11 October 2023 and ran until Tuesday 31 October 2023. An email was sent to 59 key stakeholders .The consultation was posted on local community pages, inviting submissions on the Council Letstalk [webpage](#).
- 1.4 Consultation posters were delivered to 33 Businesses on Morrison Avenue, Langston Lane, and at Northlink on 11 - 12 October 2023. Bishopdale Community Library, Papanui Service Centre, and Fendalton Service Centre were provided with leaflets, posters, printed submission forms and the consultation link to share online.
- 1.5 Webinars were scheduled on Thursday 26 October 2023 at 12:00pm and 6:30pm. Only two people registered to attend each session, so recording of the midday session was made available online and the evening session was cancelled.
- 1.6 During the consultation period, staff met with residents on 451 and 453 Greers Road. Residents of 453 specifically wanted to discuss the impact of their on-street parking. This property has three units on a single shared driveway and the on-street parking is essential to relieving parking congestion for visitors, maintenance workers, and health care workers due to the ages of residents. This feedback was taken into consideration for potential amendments to the design scheme.

Summary of Submissions Ngā Tāpaetanga

- 1.7 Submissions were made by four recognised organisations, one business and 151 individuals. All submissions are available on the project’s [Letstalk webpage](#).
- 1.8 Submitters were asked if the Intersection upgrade would improve safety.

Do you think this intersection upgrade will improve safety?	Number of submitters
Yes	128 (82%)
Somewhat	18 (12%)
No	7 (4%)
Other	3 (2%)

- 1.8.1 Submitters felt providing traffic lights will:
 - Improve safety when turning (84)

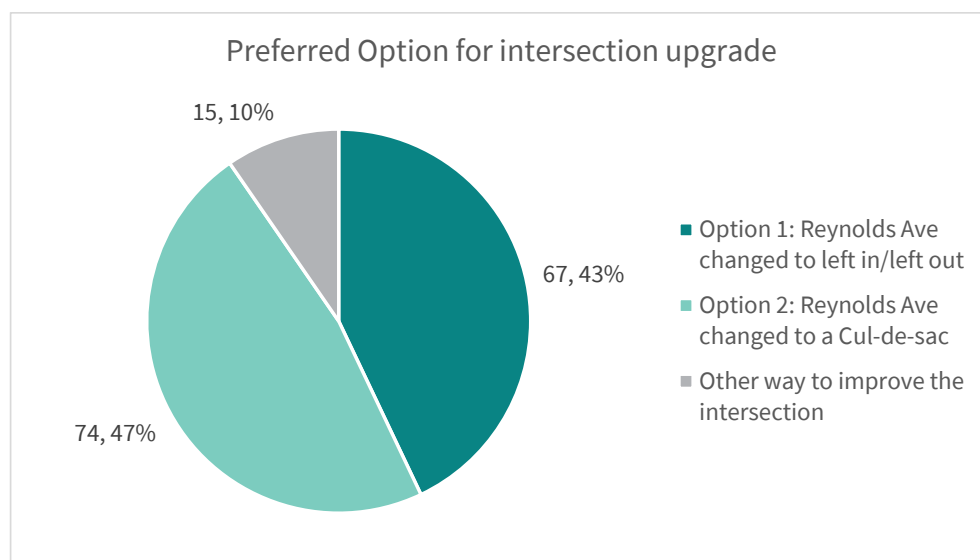
Sensitivity: General

- Provide safer crossings for pedestrians and cyclists, especially school children (39)
- Reduce large volumes of traffic, congestion and wait times (22)
- Improve traffic management and flow (17)
- Improve safety for all users (14)
- Improve visibility (6)

We also heard that the intersection is currently prone to accidents/near misses (12).

1.8.2 Some submitters expressed concerns that the upgrades wouldn't stop, or even contribute to further congestion – either in the area by pushing the traffic onto other roads (11).

- 1.9 For the two options available for submitters to provide feedback on, 47% (74) preferred Option 2 – Reynolds Ave changed to a Cul-de-sac 43% (67) preferred Option 1 – Reynolds Ave changed to left in/left out. The remaining 10% did not select a preferred option.



- 1.10 Submitters preferred Option 2 – Reynolds Ave changed to a Cul-de-sac for the following reasons:

- Three pedestrian crossings and direct route past Reynolds are preferable for pedestrians and cyclists, encouraging active modes of transport (23)
- It decreases traffic congestion generated from turning in/out of Reynolds (18)
- It reduces traffic on Reynolds Avenue, including short-cutting (14)
- It provides safer access to school using various modes of transport (9)
- It improves safety by not having two intersections close together (9)
- Overall, it is a more practical and safer option (8)
- It provides more green space (7)

Sensitivity: General

1.9.1. Across all submitters, the following concerns were raised about Option 2:

- Increased traffic on streets surrounding Reynolds Avenue, including smaller streets like Bainton Street, needing traffic calming measures, as well as Sawyers Arms/Greers intersection (16)
- Possible traffic build-up towards Harewood Road, requiring a syncing of traffic lights (12)

1.11 Submitters preferred Option 1 – Reynolds Ave changed to left in/left out, for the following reasons:

- It retains access to/from Reynolds, which is preferable for residents (35)
- Loss of right turn to/from Reynolds is acceptable, as other routes via Sawyers Arms or Harewood Road is available and the current right turns to/from Reynolds Avenue being time-consuming and dangerous (13)
- It is preferable for emergency service access (3)

1.11.1 Concerns raised about Option 1 included:

- Unsafe turning behaviour in/out of Reynolds might continue, particularly affecting cyclists (6)
- Needing additional traffic calming measures on surrounding streets to prevent Reynolds continued use as a short-cut (4)

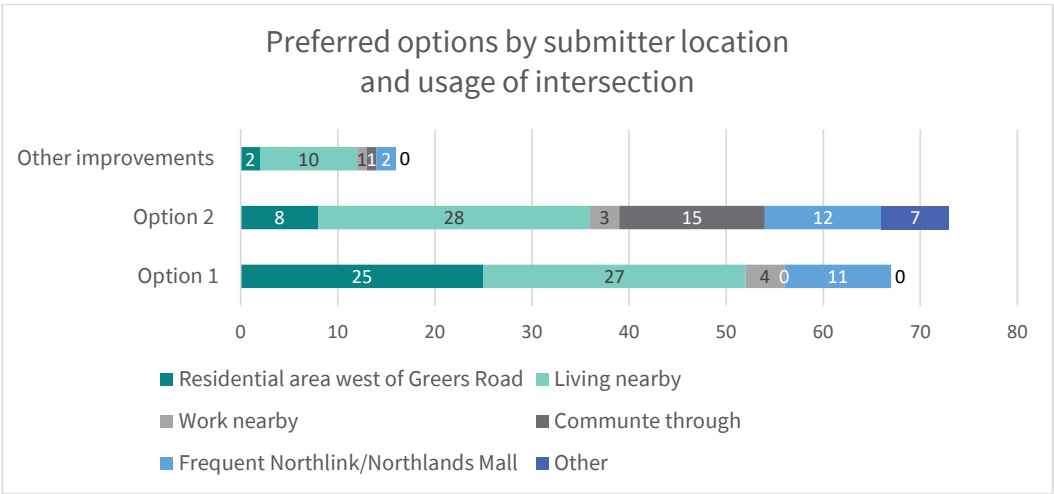
1.12 Submitters who preferred to improve the intersection another way, had the following suggestions:

- A four-way traffic light including Reynolds Ave, keeping it as a route in all directions (3)
- A roundabout (2)
- Reynolds left-in only (2)

1.13.1. Across submitters, a few commented that they'd prefer traffic lights only (3), or that no improvements were either needed or would make a difference (4).

1.13 The order of preferred options differed somewhat among local residents, compared to overall submissions received. Local submitters favoured Option 1 over Option 2, whereas those working nearby, commuting through or frequenting Northlink/Northlands Mall preferred Option 2, as shown in the below graph.

Sensitivity: General



The residential area west of Greers Road, includes Reynolds Avenue, Tivoli Place, Topaz Place, Tralee Place, Ian Place, Quinton Place, Blossomdale Place, and Drysdale Street.

1.14 Across submitters, other key issues raised were:

- Overall, upgrades provide good safety improvements for cyclists (7)
- The cycle lanes aren’t needed and will further affect surrounding streets, for example by narrowing access ways and turning radius (6)
- More could be improved for cyclists, for example specific or clearly marked shared-path bike turning lanes, green paint along the whole cycle lane, longer and wider slip lanes (4)
- Too much loss of car parks (5)

Sensitivity: General

7 RECOMMENDED OPTION

7.1 Further context investigations

Following elected member and community feedback, further investigations to the existing use of the project area during weekends have been undertaken as outlined below:

Local area weekend traffic counts

Traffic counts at the perimeter of the Reynolds Avenue / Drysdale Street local road area have been undertaken on a Saturday to measure the weekend flows and assess how these compare with the weekday flows on which the previous assessment of traffic impacts has been made. The counts are presented in Table 18, Table 19, and Table 20, below.

Table 18: Reynolds Avenue/Greers Road weekend turning counts.

	Reynolds Avenue		Greers Road			
	Left out	Right out	Left in	Right in	Northbound	Southbound
10am-11am	37	7	11	23	790	887
11am-12pm	32	1	10	22	839	933
12pm-1pm	45	1	12	22	870	1003
1pm-2pm	25	4	15	18	770	875
Totals	139	13	48	85	3269	3698

Table 19: Reynolds Avenue/Sawyers Arms Road weekend turning counts.

	Reynolds Avenue		Sawyers Arms Road			
	Left out	Right out	Left in	Right in	Eastbound	Westbound
10am-11am	10	12	15	15	403	421
11am-12pm	8	14	15	15	502	475
12pm-1pm	15	10	14	16	560	477
1pm-2pm	13	16	29	14	447	448
Totals	46	52	73	60	1912	1821

Table 20: Drysdale Street/Highsted Road weekend turning counts.

	Drysdale Street		Highsted Road			
	Left out	Right out	Left in	Right in	Northbound	Southbound
10am-11am	30	6	7	27	236	318
11am-12pm	40	6	11	33	336	365
12pm-1pm	44	11	13	41	369	369
1pm-2pm	38	4	3	34	385	288
Totals	152	27	34	135	1326	1340

Sensitivity: General

At all three sites, peak flows were observed during the lunchtime (12pm-1pm) period. Peak intersection flows, including movements on the major roads, were slightly lower than the weekday peak flows. However, peak turning movements in and out of the local roads were similar or higher than the weekday peaks. The most notable increase was at the intersection of Reynolds Avenue and Greers Road, where the average turning movement count (turns in and out of the minor road) increased from 56 to 71 vehicles per hour.

The results do show that the intersection traffic counts are relatively similar between the weekdays and weekend, and that the difference is not great enough to affect conclusions previously drawn.

Weekend parking survey

A parking survey has been undertaken on a Saturday to assess the weekend on-street parking demand. This is presented alongside the weekday parking survey data and the proposed parking supply, including the new indented parking added on Greers Road following consultation. This is presented in Table 21, below. Both surveys were undertaken between 7am and 5:30pm with observations at half hour intervals. Peak demand typically occurred between late morning and mid-afternoon, indicating the survey periods were sufficient to capture the times of highest parking demand.

Table 21: On-street parking supply and demand

Location		Parking supply		Weekday demand		Weekend demand	
		Existing	Proposed	Average	Peak	Average	Peak
Greers Road (Harewood to Langdons)	West	8	0	0	0	1	1
	East	8	0	1	1	1	2
Greers Road (Langdons to Paprika)	West	17	14	4	12	4	9
	East	17	14	3	11	4	6
Langdons Rd (Greers to Oakland)	North	19	5	3	5	3	3
	South	22	8	5	8	1	3
Reynolds Ave	Opt. 4b	18	16	1	2	3	5
	Opt. 4c/d	18	12	1	2	3	5

As can be seen in Table 21, the on-street parking demand during the weekend survey was typically similar or even slightly lower than the weekday survey. The most notable exception was on Reynolds Avenue, which was higher on the weekend, but still well within the capacity of the street. In both surveys, the proposed design accommodates the peak parking demand on all survey sections except on Greers Road between Harewood Road and Langdons Road, where all on-street parking is removed. The peak parking demand in this section across both surveys was one vehicle. It is noted that, whilst the observed demand is generally met, some people may need to park slightly further from their destination than desired, or park off-street.

Sensitivity: General

7.2 Further investigation of alternative options

Full signalisation including Reynolds Avenue

Further investigation of the traffic impacts of including Reynolds Avenue in the Greers Road and Langdons Road signalised intersection has been carried out. It was previously identified that the performance of the intersection would be poor due to the provision of additional signal phases, particularly as the phases for Reynolds Avenue and Langdons Road would not be able to run at the same time due to the layout of the intersection. An additional factor that affects the operation is that the intersection would be quite large and would therefore need to allow a long clearance time (amber and red light time) between the phases.

Several different phasing scenarios were investigated. The scenarios did retain some operational and safety risks, such as allowing filter right turns into Reynolds Avenue. As there is no right turn lane for this movement, vehicles waiting to turn right would queue in the southbound through lane with through vehicles also queuing or undertaking via the cycle lane. It is recommended to ban the right turn movement into Reynolds Avenue with this option, should it ever be progressed. Despite these compromises to allow for the most efficient operation of the intersection, it was still found to perform poorly, and significantly worse than the preferred signalised T-intersection configuration.

In the morning peak, the overall intersection delay is expected to be approximately 90 seconds, twice the delay of the preferred option. Performance deteriorates significantly in the evening peak, with the overall intersection delay approximately 225 seconds, compared to 100 seconds for the preferred option. It should be noted that the new signals would be coordinated with the Greers Road/Harewood Road signals.

Left-in only at Reynolds Avenue included as an option for approval

As noted in Section 7.4, Option 4c (referred to as Option 3 for the purposes of community consultation and approvals) has been put forward as the recommended option following community consultation. This design had not previously been developed to the same level of detail as Option 4b and Option 4d, which were consulted on, although it did have a Safe System Audit completed on it. The primary items added to the earlier scheme design are the provision of cycle paths connecting riders on Reynolds Avenue to and from the shared path area on Greers Road and the provision of an additional two new trees (subject to the location of underground services), as presented in Figure 52.

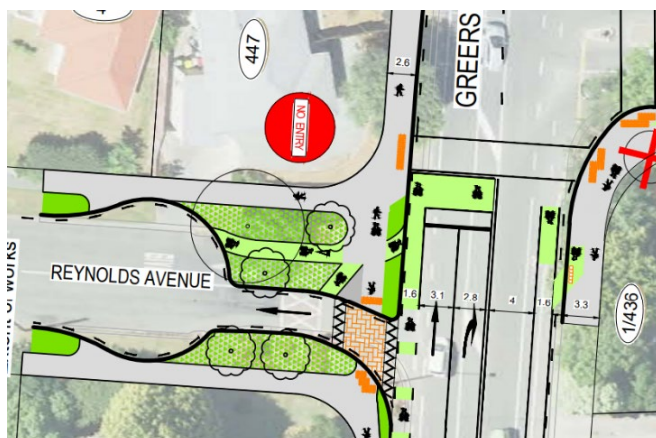


Figure 52: Plan snip presenting new cycle path connections and additional trees on Option 4c

Sensitivity: General

7.3 Scheme modifications following consultation

The following changes have been made to the proposed plan in response to consultation feedback, resulting in the final plan for approval. The final plans, for Option 4b, Option 4c, and Option 4d, are provided in APPENDIX I.

Indented parking outside No. 453 Greers Road has been added following concern on the removal of on-street parking at this location and limited nearby on-street and off-street alternatives. The road alignment at this location makes this achievable with less physical works and impacts on people walking and cycling than at other locations around the intersection. Two spaces are provided. Whilst a time limit on these would be desirable, there are no other timed restrictions in the surrounding area, and it has been advised that enforcement is unlikely. Timed restrictions could be added in the future if necessary. This change applies to all options.

Green coloured surfacing across side roads has been updated to blocks rather than solid green as this reflects how the markings would be installed in practice. This change applies to all options.

The alignment of the left-turn out of Reynolds Avenue in Option 4b will be further considered at the detailed design stage to increase the separation between Reynolds Avenue and the signalised intersection and force drivers to square up more when making the turn. It should be noted that this would not fundamentally resolve the safety and operational issues identified with this option.

7.4 Proposal description

Considering the feedback from nearby residents alongside the technical assessment and feedback from the wider community, Option 4c – left-in only at Reynolds Avenue is the recommended option for implementation. This avoids the key safety and operational issues associated with the left-out movement close to a signalised intersection on an arterial road, whilst allowing vehicle access into the local area. This would address the concern from FENZ that the full cul-de-sac in Option 4d would increase the response time for appliances travelling from the Ilam station due to not being able to turn left into Reynolds Avenue from Greers Road. It also allows more direct access for ambulances responding to highly time-critical incidents such as cardiac arrest.

However, it is noted that Option 4b – left-in/left-out at Reynolds Avenue is to be progressed as the staff recommended option due to the concerns raised by residents in the local area surrounding Reynolds Avenue of the impacts of removing left-turn vehicle access in and out at Greers Road.

Sensitivity: General

Option 4c (designated Option 3 for consultation and approvals purposes) as shown in the plans in APPENDIX I has the following features:

- Traffic signals at the intersection of Langdons Road and Greers Road.
- Dedicated turn lanes on all approaches to the signalised intersection.
- Shared pedestrian and cycle paths around the signalised intersection, connected with shared signalised crosswalks.*
- Painted cycle lanes on all approaches and departures of the signalised intersection and continuing to Harewood Road.
- New indented parking outside No. 453 Greers Road.
- The removal of two street trees on Langdons Road and the planting of four replacement trees on Reynolds Avenue, the closest suitable location.
- Turning restrictions to allow the left-turn in only to Reynolds Avenue at its intersection with Greers Road.*

* Option 4b differs from Option 4c in that a signalised crosswalk is not provided on the south approach to the intersection and that the left-turn out movement from Reynolds Avenue is also permitted.

7.5 Further scheme investigations

The following items were investigated following consultation but are not recommended to be adopted and are not shown on the final scheme plans.

Shared lane markings in the left-turn lanes on Langdons Road and Greers Road to indicate that people cycling can ride in these lanes were investigated. In accordance with design guidance, the cycle lanes are located between the left-turn and through traffic lanes, to remove the conflict from the intersection where the crash risk is higher. This means riders would need to turn left from the general traffic lane. It would be desirable to provide for this; however, the relatively high left-turning traffic volumes and long left-turn lane on Langdons Road are not appropriate for encouraging riders to share the lane. It is therefore recommended to not install markings to encourage this, but rather to allow riders to choose their own path.

The turning volumes and lane length on Greers Road are appropriate for shared lane markings, however these are not proposed, to keep it consistent with the Langdons Road approach.

An alternative design that could improve the safety for people cycling at this location would be to shorten the left turn lane on Langdons Road. The lane length as designed (90 m) caters for the expected left turning queue length as agreed during the project investigations. Shortening the lane would reduce the length that left-turning riders share the lane for and reduce vehicle speeds at times when the queues are shorter. It would result in the left-turning vehicle queue extending to prior to the development of the turning lanes at peak times, including potentially blocking the cycle lane. An issue that would need further investigation is the degree to which queued through traffic would restrict the opportunity for left-turning drivers to access the shorter left-turn lane through queued right-turning vehicles.

A direct cycle crossing from Langdons Road to the shared path on the west side of Greers Road was investigated. For the options with a crossing on the Greers Road south approach, riders can use the crossing, and may even choose to ride directly from Langdons Road to the ramp during the crossing phase. For Option 4b, where the left-turn out movement from Reynolds Avenue means a crossing on the Greers Road south approach cannot be provided, a new ramp would be required on the west side of Greers Road. Due to the different intersection layouts, this would be in a different location to the ramp in the other options. The required location is constrained by large service

Sensitivity: General

chambers and a communications box and is located at the narrowest point of the path. It is therefore not likely that a ramp and path of appropriate width can be provided and are thus not included in the design.

7.6 Cost estimate review

An update of the cost estimate for Option 4b and Option 4d has been completed following the modifications to the scheme design outlined in Section 7.3. A cost estimate for Option 4c has also been developed. The opportunity has also been taken to revise rates following costs observed on other projects since the original estimate was developed. The revised rates and new indented parking have had a combined impact on increasing the estimated project cost. The updated cost estimates are presented below:

Option 4b: \$2.58 M

Option 4c: \$2.58 M

Option 4c: \$2.59 M

7.7 Traffic Controls and Parking Resolutions

The traffic control and parking resolutions were prepared based on the final approval plans in APPENDIX I and are included in APPENDIX J. These are to be incorporated into the Community Board and Council Reports. Resolutions have been prepared for the three options progressed to full scheme design: Option 4b, Option 4c, and Option 4d (Option 1, Option 3, and Option 2, respectively, as presented to the community and elected members).

Alternative Option (Option 2)

That the Waimāero Fendalton-Waimairi-Harewood Community Board and Waipapa Papanui-Innes-Central Community Board recommend that the Council:

1. Approves that in accordance with Sections 6 and 10.5 of the Land Transport Rule: Traffic Control Devices 2004, all road user movements at the Greers Road / Langdons Road intersection be controlled by Traffic Signals, as detailed on plan SK01-4D, sheet 1, dated 09/11/2023 and attached to this report as **Attachment E**.
2. Approves, pursuant to Clause 18 of the Christchurch City Council Traffic and Parking Bylaw 2017:
 - a. That a Special Vehicle Lane for the use of northeast bound cycles only be installed on the northwest side of Greers Road, commencing at its intersection with Harewood Road, and extending in a north-easterly direction for a distance of 344 metres, as detailed on plan SK01-4D, sheet 1, dated 09/11/2023 and attached to this report as **Attachment E**.
 - b. That a Special Vehicle Lane for the use of southwest bound cycles only be installed on the southeast side of Greers Road, commencing at its intersection with Harewood Road, and extending in a north-easterly direction for a distance of 238 metres, as detailed on plan SK01-4D, sheet 1, dated 09/11/2023 and attached to this report as **Attachment E**.
 - c. That a Special Vehicle Lane for the use of southwest bound cycles only be installed on the southeast side of Greers Road, commencing at its intersection with Langdons Road, and extending in a north-easterly direction for a distance of 65 metres, as detailed on plan SK01-4D, sheet 1, dated 09/11/2023 and attached to this report as **Attachment E**.
 - d. That a Special Vehicle Lane for the use of southeast bound cycles only be installed on the northeast side of Langdons Road, commencing at a point 15 metres southeast of its intersection with Greers Road (measured from the prolongation of the northeastern kerb line of Greers Road), and extending in a south-easterly direction for a distance of 130 metres, as detailed on plan SK01-4D, sheet 2, dated 09/11/2023 and attached to this report as **Attachment E**.
 - e. That a Special Vehicle Lane for the use of northwest bound cycles only be installed on the southwest side of Langdons Road, commencing at a point 7 metres southeast of its intersection with Greers Road (measured from the prolongation of the southeastern kerb line of Greers Road), and extending in a south-easterly direction for a distance of 124 metres, as detailed on plan SK01-4D, sheet 2, dated 09/11/2023 and attached to this report as **Attachment E**.
3. Notes that the above resolutions are in reliance on the Council's powers under the Christchurch City Council Traffic and Parking Bylaw 2017, the Land Transport Rule: Traffic Control Devices 2004 and Part 21 of the Local Government Act 1974.
4. Approves that the project shall proceed to detailed design, as detailed on **Attachment E**.
5. Approves that the project shall proceed to construction subject to adequate budget being available to meet the contract commitments for construction.

That the Waimāero Fendalton-Waimairi-Harewood Community Board and Waipapa Papanui-Innes-Central Community Board:

6. Approve all kerb alignments, road surface treatments and road markings on Greers Road, commencing at its intersection with Harewood Road, and extending in a north-easterly direction for a distance of 366 metres, as detailed on plan(s) SK01-4D, sheets 1 and 2, and attached to this report as **Attachment E**.
7. Approve all kerb alignments, road surface treatments and road markings on Reynolds Avenue, commencing at its intersection with Greers Road, and extending in a north-westerly direction for a distance of 37 metres, as detailed on plan(s) SK01-4D, sheets 1 and 2, and attached to this report as **Attachment E**.
8. Approve all kerb alignments, road surface treatments and road markings on Langdons Road, commencing at its intersection with Greers Road, and extending in a south-easterly direction for a distance of 146 metres, as detailed on plan(s) SK01-4D, sheets 1 and 2, and attached to this report as **Attachment E**.
9. Approve all kerb alignments, road surface treatments and road markings on Bainton Street, commencing at its intersection with Greers Road, and extending in a north-westerly direction for a distance of 14 metres, as detailed on plan SK01-4D, sheet 1, and attached to this report as **Attachment E**.
10. Approve all kerb alignments, road surface treatments and road markings on Hoani Street, commencing at its intersection with Greers Road, and extending in a south-easterly direction for a distance of 2 metres, as detailed on plan SK01-4D, sheet 1, and attached to this report as **Attachment E**.
11. Approve the scheme design, landscaping changes, lane marking changes, and kerb alignment changes along Reynolds Avenue (including the creation of a cul-de-sac on Reynolds Avenue at its southeastern end / at its intersection with Greers Road) as detailed on plan SK01-4D, sheets 1 and 2, dated 09/11/2023 and attached to this report as **Attachment E**.
12. Approve, pursuant to Clause 7 of the Christchurch City Council Traffic and Parking Bylaw 2017, that the stopping of vehicles be prohibited at all times:
 - a. On the northwest side of Greers Road commencing at its intersection with Harewood Road, and extending in a north-easterly direction to its intersection with Bainton Street, as detailed on plan SK01-4D, sheet 1, and attached to this report as **Attachment E**.
 - b. On the northwest side of Greers Road commencing at its intersection with Bainton Street, and extending in a north-easterly direction for a distance of 166 metres, as detailed on plan SK01-4D, sheet 1, and attached to this report as **Attachment E**.
 - c. On the northwest side of Greers Road commencing at a point 177 metres north-east of its intersection with Bainton Street, and extending in a north-easterly direction for a distance of 40 metres, as detailed on plan SK01-4D, sheet 1, and attached to this report as **Attachment E**.
 - d. On the southeast side of Greers Road commencing at its intersection with Harewood Road, and extending in a north-easterly direction to its intersection with Hoani Street, as detailed on plan SK01-4D, sheet 1, and attached to this report as **Attachment E**.

- e. On the southeast side of Greers Road commencing at its intersection with Hoani Street, and extending in a north-easterly direction to its intersection with Langdons Road, as detailed on plan SK01-4D, sheet 1, and attached to this report as **Attachment E**.
 - f. On the southeast side of Greers Road commencing at its intersection with Langdons Road, and extending in a north-easterly direction for a distance of 68 metres, as detailed on plan SK01-4D, sheet 1, and attached to this report as **Attachment E**.
 - g. On the southwest side of Bainton Street commencing at its intersection with Greers Road, and extending in a north-westerly direction for a distance of 18 metres, as detailed on plan SK01-4D, sheet 1, and attached to this report as **Attachment E**.
 - h. On the northeast side of Bainton Street commencing at its intersection with Greers Road, and extending in a north-westerly direction for a distance of 18 metres, as detailed on plan SK01-4D, sheet 1, and attached to this report as **Attachment E**.
 - i. Along the northeastern side of Reynolds Avenue, commencing at a point 109 metres southeast of its intersection with Blossomdale Place and extending in a south-easterly direction to the end of the road and along the end of the cul-de-sac as detailed in plan SK01-4D, sheets 1 and 2, and attached to this report as **Attachment E**.
 - j. On the northeast side of Langdons Road commencing at its intersection with Greers Road, and extending in a southeasterly direction for a distance of 146 metres, as detailed on plan SK01-4D, sheet 2, and attached to this report as **Attachment E**.
 - k. On the southwest side of Langdons Road commencing at its intersection with Greers Road, and extending in a southeasterly direction for a distance of 126 metres, as detailed on plan SK01-4D, sheet 2, and attached to this report as **Attachment E**.
13. Approve that the pathway on the southern corner of the intersection of Greers Road and Langdons Road, extending in a westerly then south-westerly direction for a distance of 23 metres, as detailed in plan SK01-4D, sheet 2, dated 09/11/2023 and attached to this report as **Attachment E**, be resolved as a westbound then south-westbound shared pedestrian / cycle pathway in accordance with Clause 21 of the Christchurch City Council Traffic and Parking Bylaw 2017.
14. Approve that the pathway on the north-eastern corner of the intersection of Greers Road and Langdons Road, extending in a south-westerly then south-easterly direction for a distance of 24 metres, as detailed in plan SK01-4D, sheet 2, dated 09/11/2023 and attached to this report as **Attachment E**, be resolved as a south-westbound then south-eastbound shared pedestrian / cycle pathway in accordance with Clause 21 of the Christchurch City Council Traffic and Parking Bylaw 2017.
15. Approve that the pathway on the northwest side of Greers Road commencing at a point 123 metres northeast of its intersection with Bainton Street (measured from the prolongation of the northern kerb line of Bainton Street), and extending in a north-easterly direction for a distance of 7 metres, as detailed in plan SK01-4D, sheet 2, dated 09/11/2023 and attached to this report as **Attachment E**, be resolved as a north-

eastbound shared pedestrian / cycle pathway in accordance with Clause 21 of the Christchurch City Council Traffic and Parking Bylaw 2017.

16. Approve in relation to trees:
 - a. That two trees be removed on the southwest side of the northwestern end of Langdons Road as detailed on Option 2 on **Attachment E**.
 - b. That all new street trees as detailed on plan SK01-4C, sheets 1 and 2, dated 09/11/2023 and attached to this report as **Attachment E**.
17. Revoke any previous resolutions pertaining to traffic controls made pursuant to any bylaw to the extent that they are in conflict with the traffic controls described above.
18. Revoke any previous resolutions pertaining to parking signage and /or road markings made pursuant to any bylaw to the extent that they are in conflict with the parking signage and /or road markings described above.
19. Approve that these resolutions take effect when parking signage and/or road markings that evidence the restrictions described in the staff report are in place.

