

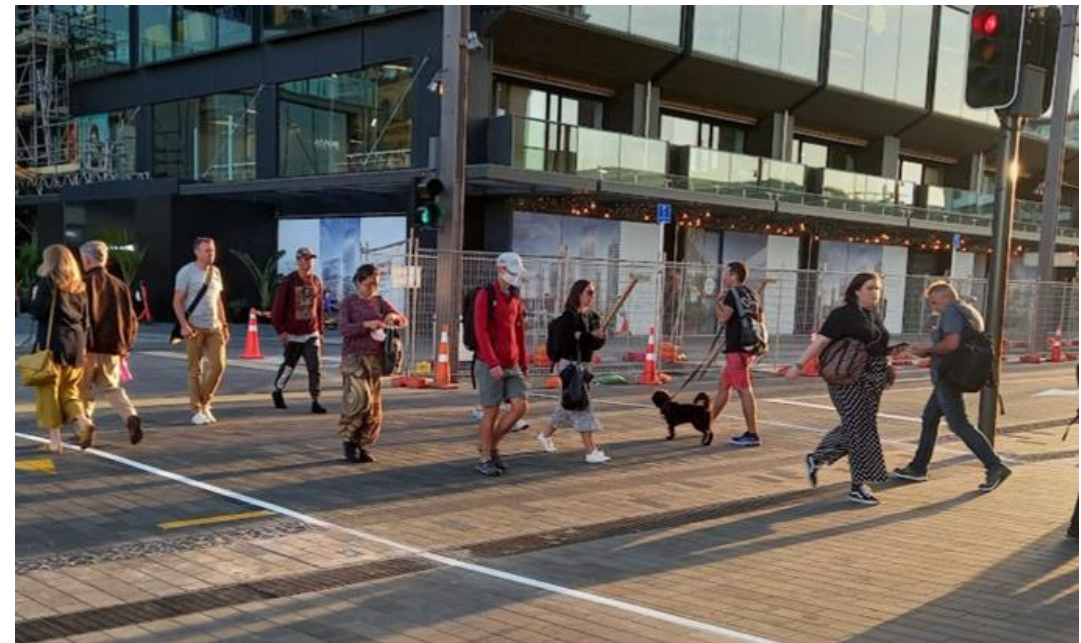
PNG: Helping create healthy people



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Today's focus

- What is the PNG?
- PNG and healthy people
- Applying the PNG in practice – using a scenario in my hood





PNG: What is it?

- Provides best practice guidance specifically based on NZ regulatory/operating environment.
- Promotes a consistent approach to planning, designing, managing and maintaining the walking network.
- Comprises nine main topic areas.



Walking in New Zealand →

Understand the context, relevant legislation, the benefits of walking, walking trends in NZ and safety.



Planning →

Understand who's walking and their needs, walkability, planning methods you can apply and funding options.



Design →

Understand the design principles for pedestrians, and design of paths, crossings, intersections and streets.



Implementation →

Consider pedestrians in temporary traffic management, maintenance and post construction monitoring.



Reviews and audits →

Check that your design adheres to best practice and meets the needs of pedestrians by applying the appropriate review or audit.



Case studies →

Need some inspiration? Check out other projects from New Zealand and around the world.



Related guidance and tools →

Technical notes, design guidance notes and tools to help create high quality walking networks and infrastructure.



Training and capability →

Webinars, training courses and other resources to upskill the planning, design and construction sectors.



Glossary →

An alphabetical list of terms and their definitions used throughout the Pedestrian Network Guidance.



Pedestrian planning principles →

Humans are diverse. Planning for pedestrians means designing for all of human capabilities and states. Measuring pedestrian activity is crucial and many methods are available. Engagement particularly with the disability sector is important, guidance is available to help with this.



Planning methods →

Pedestrians should be considered within all planning processes. There are many levers and programmes to encourage and support walking. Walking should also feature in district plans and be considered during resource consent processes.



Walkability →

Walkability describes the extent to which the built environment is walking-friendly. Urban form contributes to walkability and a walkable place will have a range of characteristics that are important for pedestrians. Methods are available to measure and assess walkability.



Funding →

Some pedestrian activities and facilities can be funded. Learn more here.

Second level topics

Pedestrian characteristics →

Humans are diverse. Designing streets and places for pedestrians means designing for all of human capabilities and states. Considerations include the space needed for different devices and for people moving at different speeds.

Human capabilities and states

Physical space and walking speed

Personas

Measuring pedestrian activity →

Effective planning for walking requires an understanding of pedestrian movement and activity. Measuring pedestrian activity allows us to understand whether streets and places are suitable for pedestrians, both now and into the future.

Engagement →

Everyone can be a pedestrian. Effective community involvement in walking projects is very important to make walking an option for as many journeys as possible.

Third level topics

Principles of Safe, Obvious and Step-free (SOS) →

By following these principles, planners and designers can create accessible, inclusive streets and places.

Assessing the demand for walking →

→

Understanding current pedestrian activity, estimating how many people would walk if the environment were modified, and forecasting walking activity in the future are important inputs to planning for walking.

Disability sector engagement →

Engaging with the disability sector helps ensure that processes, plans, and infrastructure for walking are all designed to be as inclusive of all people as possible.

Pedestrian Network Guidance (PNG) – What is it?

- It outlines advice for helping decide on the type of provision that should be made, including for those with a wide range of disabilities.
- It also provides examples and case studies.



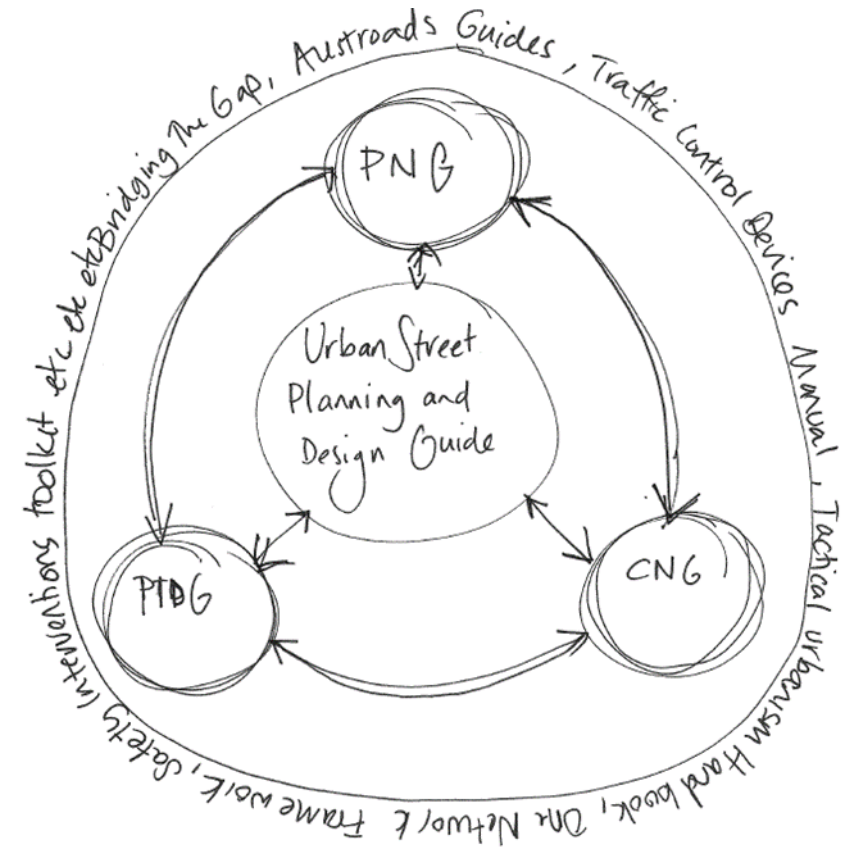
Pedestrian Network Guidance (PNG) – What is it?

- It applies to places used by pedestrians, including:
 - Streets, shared spaces, plazas
 - Paths through parks and recreational areas
- It applies to new developments, facility upgrades and existing environments.



PNG: What is it?

- The PNG exists within a Waka Kotahi multimodal guidance ecosystem and wider guidance ecosystem.
- The Aotearoa Urban Street Planning and Design Guide is at the centre offering guidance to create multimodal streets.
- The Cycle Network Guidance (CNG) and the Public Transport Design Guide (PTDG) are also online frameworks and reference each other throughout.

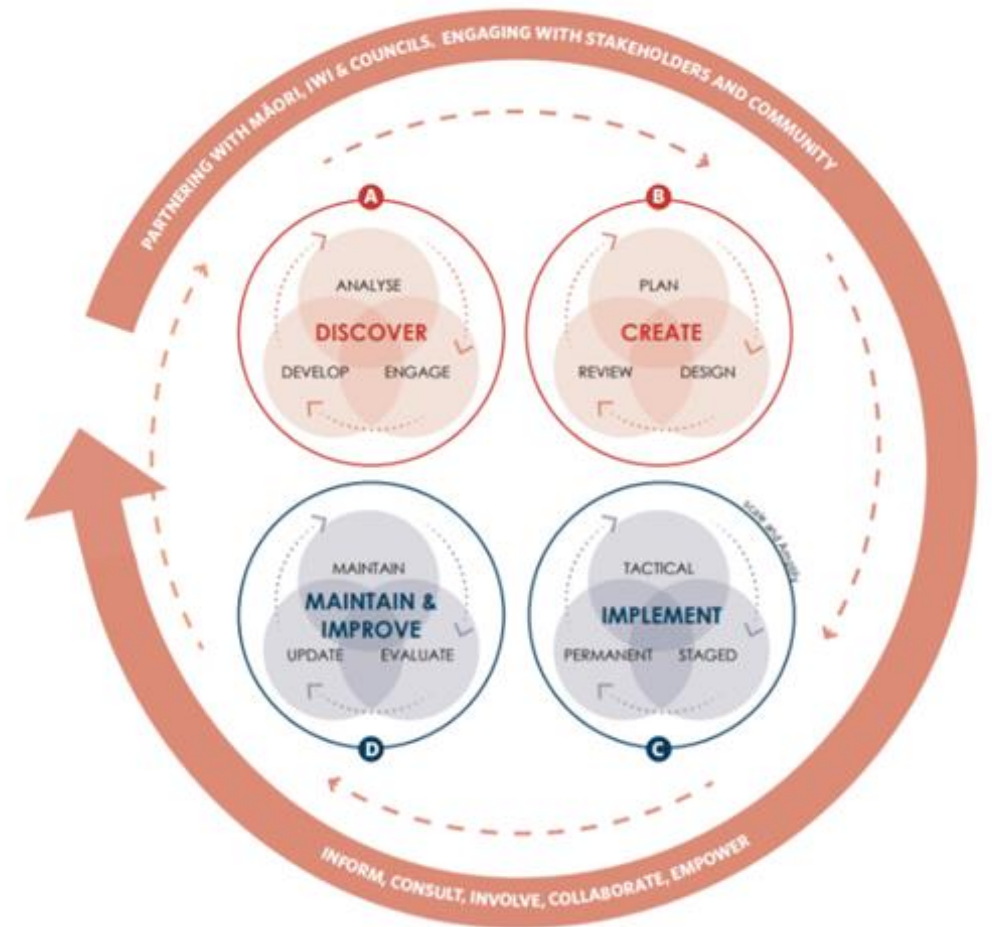


PNG and Healthy people



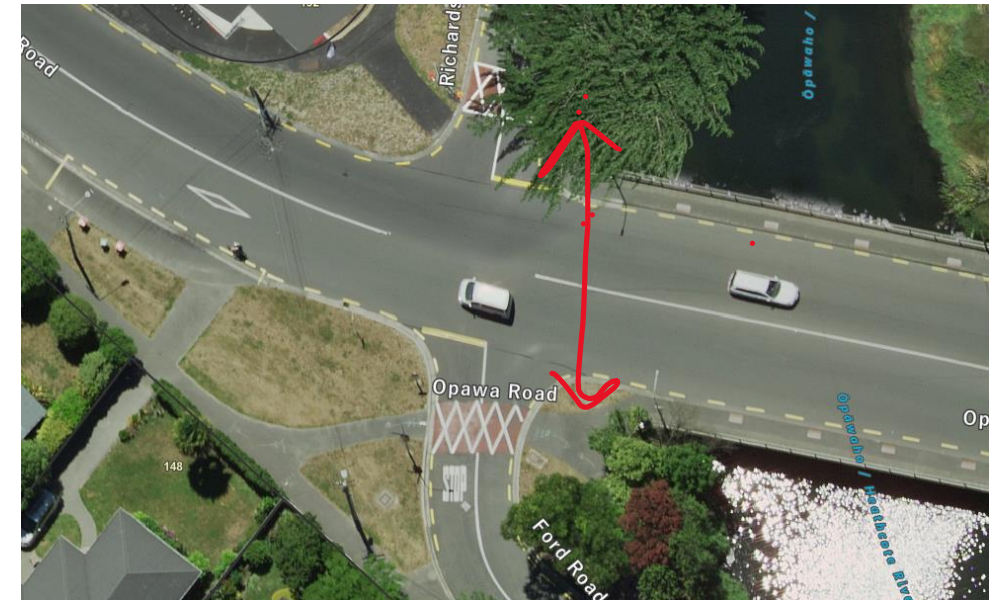
Applying the PNG in practice

- The Aotearoa Urban Street Planning and Design Guide recognises that creating good urban streets is an iterative, non-linear process.
- The discover and create phases of the process are most closely tied to the planning and design of urban streets and spaces.
- Today will look at a scenario through the discover and create phases using the PNG guidance.



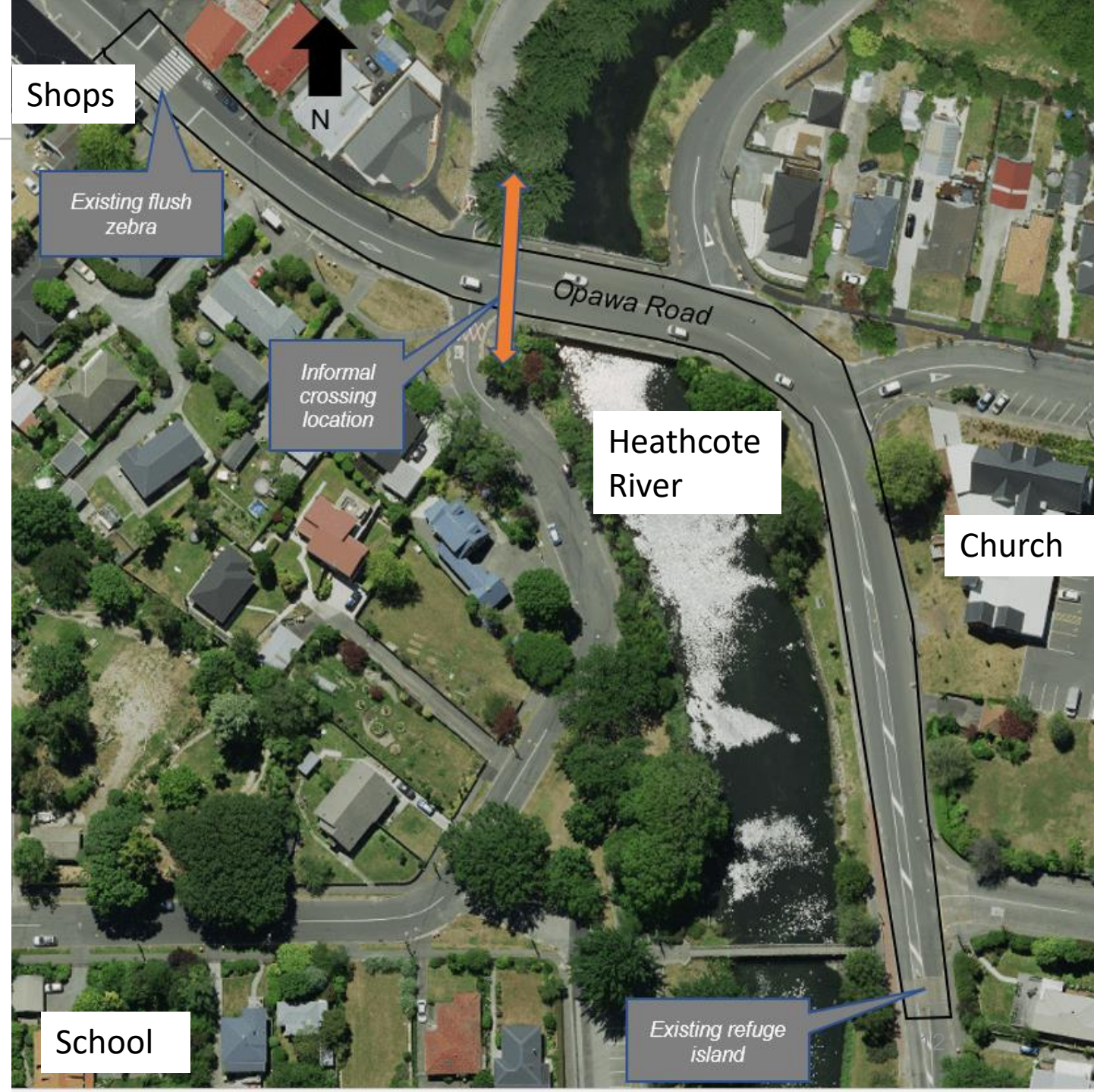
Scenario – Opawa Road

- Here is the informal crossing location and the worn grass where people wait to cross the road.
- A scope for the project was further refined to look at a section of Opawa Road not just the location of concern.



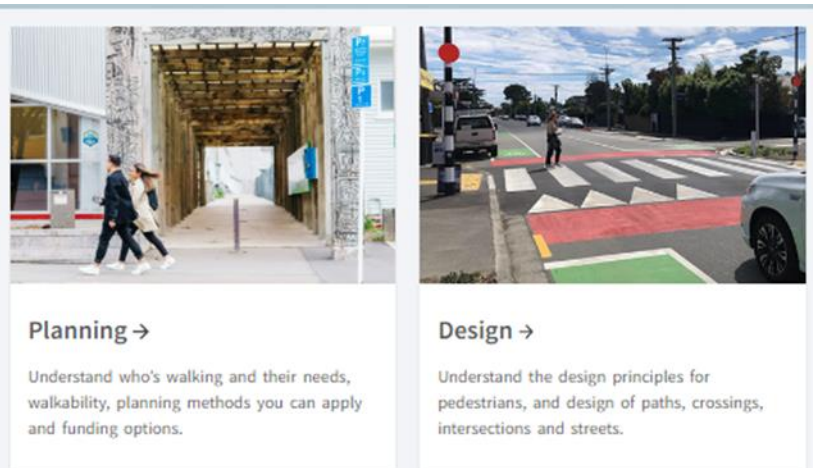
Scenario - Context

- Predominately residential area, some shops, a school and other destinations
- Approximately 7,600 vpd
- 50km/hour speed limit (at time of writing the paper)



Scenario – Discovery phase

- Relevant PNG guidance:
 - Planning – Pedestrian planning principles
 - Planning – Walkability
 - Design – Pedestrian design principles
 - Design – Crossings



Pedestrian planning principles



Pedestrian characteristics

Principles of Safe, Obvious and Step-free (SOS)

Measuring pedestrian activity

Assessing the demand for walking

Engagement

Disability sector engagement

Scenario – Discovery

- Safe, obvious and step free (SOS)

Table 4: SOS principles assessment

Principle	Existing situation
Safe	Lack of <u>safe crossing sight distance</u> at the location of concern and speeds that would increase the likelihood of death or serious injury in a collision between a motor vehicle and a pedestrian.
Obvious	It is somewhat obvious that there is no formal crossing at the location of concern and the zebra crossing is visible allowing people to <u>make a decision</u> on where to cross.
Step free	There are no kerb cutdowns at the location of concern, so is not step free.



Figure 6: Views to the east

Scenario – Discovery

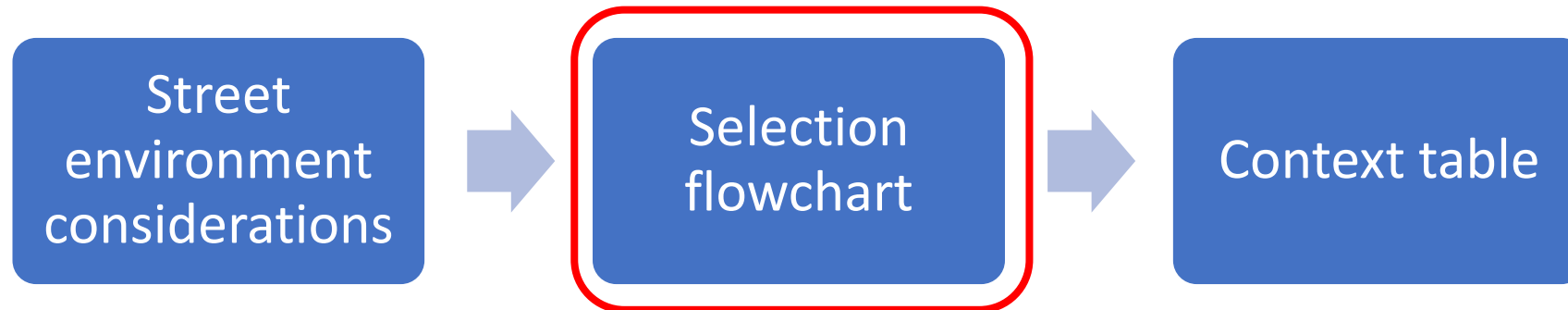
- Pedestrian network characteristics



Table 1 - Assessing the walking environment

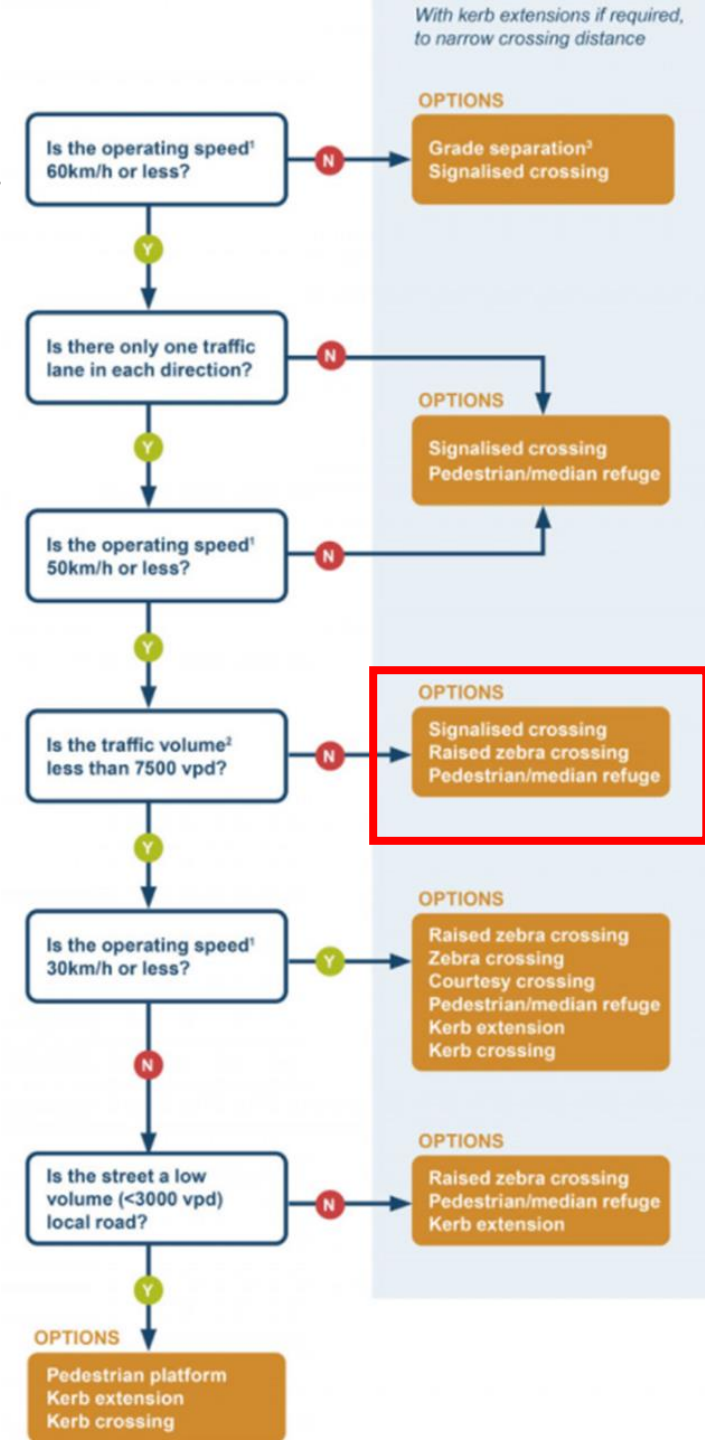
Pedestrian network characteristic	Assessment
<p>Safe - Public areas and walking facilities should be safe to use at all times of day and for people to feel safe to spend time in.</p> <p>SAFE</p>	<p>This informal crossing location is not particularly safe due to the lack of appropriate sight distance. However, it is noted that there have been no recorded crashes involving pedestrians at this location in the last 10 years.</p>
<p>Inclusive - All walking environments should adhere to the principles of inclusive design by ensuring that the environment is accessible and usable by, as many people as possible.</p> <p>INCLUSIVE</p>	<p>In the general proximity there is a priority crossing in the form of a zebra which caters for people who require a priority crossing. There are no kerb cut downs at the informal crossing location meaning that wheeled mobility devices would not be able to cross at this location.</p>
<p>Comfortable - Walking areas should allow unhindered movement and provide sufficient width and gentle gradients.</p> <p>COMFORTABLE</p>	<p>The crossing location is not comfortable due to the pressure to cross quickly due to the speed of oncoming traffic and the limited sight distance to these vehicles.</p>
<p>Direct - Facilities should be positioned to provide convenient access to major walking trip attractors, without the need to cross major roads or other road users.</p> <p>DIRECT</p>	<p>This crossing location is very direct as it links two walking routes.</p>
<p>Legible - Features should be consistent and easy to understand so that people can intuitively know how to navigate the environment.</p> <p>LEGIBLE</p>	<p>When people walking or biking along the river arrive at this location the way they should cross the road is not legible.</p>
<p>Connected - Walking networks should have a high density of routes that provide easy access for pedestrians to the surrounding area, including public transport and surrounding networks.</p> <p>CONNECTED</p>	<p>A crossing at this location would provide a more connected walking network.</p>
<p>Attractive - Walking environments should be inviting for pedestrians to use and spend time in. This can be achieved through the use of shade and pollution, places to sit, play, or rest, as well as a clean and visually appealing environment.</p> <p>ATTRACTIVE</p>	<p>This route is highly attractive as it traverses the Heathcote River where resting places are provided, and shade is offered by large trees.</p>

Scenario - Create



Scenario – Create phase

- **Design – Crossings – selection flow chart**
- A signalised crossing would not be appropriate given the out-of-context nature, essentially drivers will not be expecting them.
- A raised zebra crossing would also not be expected so close to a bend, even if low operating speeds can be achieved.
- A median refuge would not give priority but would simplify the task of crossing the road and help reduce traffic speeds, and a zebra is close by for those that need a priority crossing.





Raised zebra

Median refuge (4.6m wide, allowing 4.5m wide traffic lanes for shared cycling and driving)

Raised safety platform

Trim vegetation

Concept proposal



Scenario – Create phase

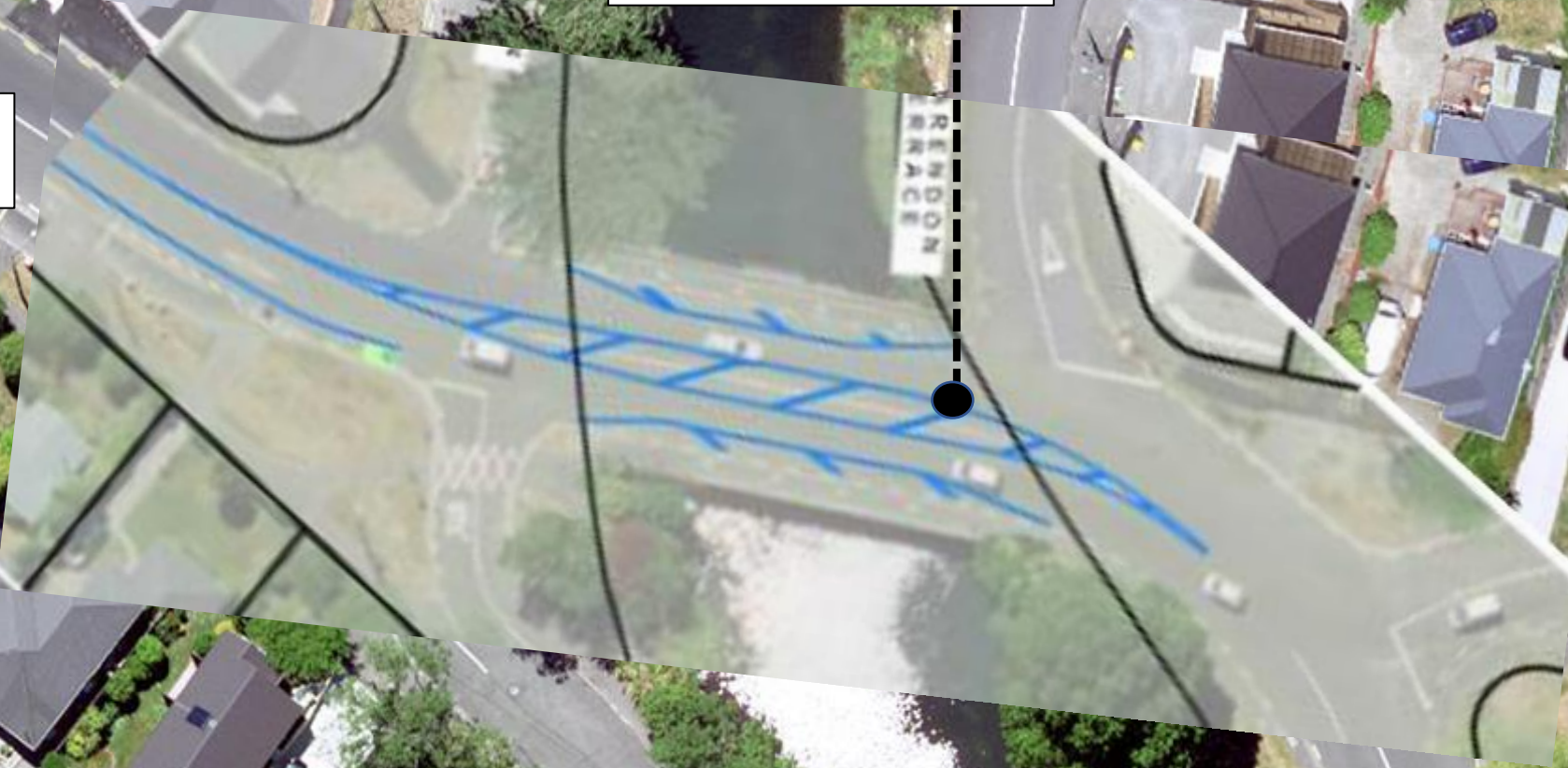
Table 4: SOS principles assessment

Principle	Existing situation	Concept design
Safe	Lack of safe crossing sight distance at the location of concern and speeds that would increase the likelihood of death or serious injury in a collision between a motor vehicle and a pedestrian.	The 30km/hr speed environment and removal of vegetation improves the crossing sight distance, and a median island makes a two-stage crossing
Obvious	It is somewhat obvious that there is no formal crossing at the location of concern and the zebra crossing is visible allowing people to make a decision on where to cross.	The zebra crossing will be more visible due to being on a raised platform allowing people to make a decision on where to cross.
Step free	There are no kerb cutdowns at the location of concern, so is not step free.	There will be kerb cut downs at the median crossing.



Recently implemented raised zebra crossing

Recently implemented markings as part of speed management project



Speed limit to be reduced

Recently implemented projects

Wrap up

- Following through the PNG guidance in a logical manner and with prompts for considering the context of the area, rather than just the crossing site, a crossing was found to be needed at the location of concern but within a wider improvement area.
- The key area improvement needed was a lower operating speed to be achieved through a 30km/hour speed limit and supporting treatments such as raised platforms and the wide median that contains the crossing.
- This outcome would support wider benefits and contribute to making the area more walkable. More walkability equals healthier people.

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