Boffa Miskell

CPTED Assessment

Crime Prevention through Environmental Design Assessment
Prepared for Te Ara Tupua Alliance

21 July 2023

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1.0 Introduction and Background

1.1 Introduction and Scope

Boffa Miskell have been engaged by Te Ara Tupua Alliance (the Alliance) to provide Crime Prevention Through Environmental Design (CPTED) advice in relation to the Ngā Ūranga ki Pito-One section of the Te Ara Tupua project (the Project). The project consists of a shared path between Ngā Ūranga and Pito-One (the Path), ending in Honiana Te Puni Reserve.

The design is nearing design completion, having already attained resource consent, and the design process to date has been guided by CPTED principles. The purpose of this assessment is to provide the Alliance commentary on any outstanding CPTED issues, and ensure the proposal aligns with the contractual conditions relating to CPTED considerations. The outcome of this assessment with enable the Alliance to review and update the design to better respond to any outstanding residual CPTED risks. Given the late stage in the process, it is understood some elements of the design may not be able to be changed.

This process of review has involved working collaboratively with the Alliance to understand the breadth of the project, however, there has been no involvement with the Alliance in the design process. The Alliance have followed their own CPTED principles through the design phase, and this is the first external review. Further, it is anticipated that this review will contribute to public assurance that CPTED risks have been both considered in the design process and externally reviewed.

The structure of this CPTED report includes:

- An overview of the approach to the assessment and background to CPTED;
- Analysis of the 'receiving environment' for the project, including the wider context, assessment of the crime profile and a summary of the key CPTED findings;
- An overview of the proposal relevant to CPTED;
- Identification of the key CPTED issues resulting from the proposal in the context of the National CPTED Guidelines; and
- CPTED conclusions and recommendations for improving safety for all users associated with the project.
- Appendices – including a glossary, site visit photos, a contextual site summary and relevant CPTED policy.

This report does not assess IPTED (Injury Prevention through Environmental Design) or traditional security measures within this project. However, these are considered broadly in the context of CPTED.

1.2 CPTED in the Design Process

For CPTED to be truly meaningful and embedded into a project, a holistic and collaborative approach needs to be taken from project inception through to commissioning (post-occupancy). It is important to focus on the 'right issues at the right time', to avoid delving into detail too

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quickly and missing a fundamental high-level CPTED issue or opportunity. If high-level urban design considerations (for example; wayfinding, spatial allocation and activation) are not addressed early, it is very difficult to achieve a satisfactory 'band-aid' solution later.

This project is in an advanced stage of design but it has been designed using CPTED principles outlined in the Cultural and Environmental Design Masterplan 2023[1] (at page 134). As well as identifying the need for an audit (this document), the design has considered:

- Activation
- Access & Layout
- Natural Surveillance & Sightlines
- Quality Environments
- Bridge Design; and
- Construction phasing of the project

1.3 Approach to Assessment (Methodology)

The following methodology has been followed in undertaking this CPTED assessment:

Task	Assigned to
Familiarisation with the site and proposal, including a desktop review of relevant background reports and consideration of police data and crime statistics.	Supplied by the Alliance
A briefing with members of the Design Team, Project Manager, Urban Designer and Planner to understand the background to the project.	Arranged by the Alliance
Day and night-time site visits and preparation of a commentary on the 'receiving environment' and any relevant observations and considerations pertaining to the project.	By one female and one male CPTED practitioner from Boffa Miskell
Work collaboratively providing feedback on CPTED issues with the Design Team.	Boffa Miskell working with the Alliance Design Team
Review of the proposal against the relevant National CPTED principles and identification of recommendations.	Prepared by Boffa Miskell

[1] Te Ara Tupua Alliance. *Te Ara Tupua. Ngā Ūranga ki Pito-One. Cultural & Environmental Design Master Plan (CEDMP)* 2023.

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This assessment is based on a review of the following documents:

- Ngā Ūranga ki Pito-One Shared Path – Hard Landscape Plan, Stage B Detailed Design, 30 March 2023
- Ngā Ūranga ki Pito-One Shared Path – Honiana Te Puni Reserve West, Stage B Detailed Design, 30 March 2023
- Ngā Ūranga ki Pito-One Shared Path – Transport Drawings, Stage B Detailed Design, 30 March 2023
- Ngā Ūranga ki Pito-One Shared Path – Furniture and Artwork, Stage B Detailed Design, 30 March 2023
- Te Ara Tupua - Cultural & Environmental Design Master Plan (CEDMP), 28 February 2023

1.4 Background to CPTED

National Guidelines for CPTED were adopted in 2005 and set the foundation for how CPTED works in New Zealand. Since this time, local Councils have integrated CPTED into their own planning framework and CPTED has become common-place in projects.

New Zealand's urban population is projected to increase by 1 million people by 2050[2], resulting in an increasingly dense urban environment. With this density, there will be greater pressure on our urban places from a number of perspectives, including keeping people safe. CPTED will become increasingly more important with greater pressure on public places to serve as multifunctional spaces for moving about, servicing, recreation and leisure. The increased demand on space brings more people together which can also increase inequality within society, issues of crime, social inequity and perception of crime can be magnified.

With greater pressure on our urban places, the role of CPTED has also begun to change and broaden as the role of urban places becomes more important for supporting social wellbeing. CPTED has also begun to think more holistically about the impact of personal safety on overall wellness and sense of community, acknowledging that if people don't feel safe they are unable to participate or benefit from urban life. As such, the following other matters have begun to influence CPTED:

- Designing to reflect character, histories and stories of the place, especially reflecting tāngata whenua. It is important people recognise their own culture to foster a sense of belonging and wellbeing.
- Designing places to cater to the requirements of different user groups promotes social equity, helping people feel comfortable in a place.
- Designing places to reflect New Zealand's contemporary and diverse populations, including minorities.

[2] Statistics New Zealand

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1.5 Assessment Criteria

The following CPTED policies have been reviewed and considered in preparation of the site specific CPTED assessment criteria for this project:

- The National Guidelines for CPTED (2005),
- The New Zealand Urban Design protocol (2005),
- Waka Kotahi's policies and the Aotearoa Urban Street Design Guide (2022)

A full outline of these documents can be found in **Appendix 3**.

CPTED Assessment Criteria	Source
That informal and formal **supervision** (Surveillance) is provided through activation, maximising views, consideration of nigh-time environment (through lighting and other design measures), minimising clutter and other design measures.	The National Guidelines for CPTED (2005)
That **safe movement and connections** are provided with well-defined routes, clear hierarchy of spaces and clear entrances to assist people in instinctively navigating.	The National Guidelines for CPTED (2005)
That places are designed with **clear and logical layout** to promote instinctive navigation.	The National Guidelines for CPTED (2005)
That **activation and uses mix** are used to enhance supervision and create busy and attractive environments in appropriate locations.	The National Guidelines for CPTED (2005)
That places reflect the people who live, work and use a place to encourage a **sense of ownership**, engagement and collaboration.	The National Guidelines for CPTED (2005)
That design measures are used to clearly indicate the nature/use of a place and degree of access (service areas, public areas). That places which are for public use have high levels of **amenity, quality environments** promote desirable behaviours.	The National Guidelines for CPTED (2005)
Should personal safety not be possible through CPTED measures, that **physical protection and security systems** are appropriately used where needed.	The National Guidelines for CPTED (2005)
The **context of a place** (activity use, user groups and frequency of use) is considered to understand the level of safety risk appropriate to an environment.	The New Zealand Urban Design protocol (2005), 7 C's
The **character**, history, stories of a place are reflected in a place to ensure people feel comfortable.	The New Zealand Urban Design protocol (2005), 7 C's

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That Crime Prevention through Environmental Design (CPTED), shall be considered in the **selection and development of design** solutions.	Te Ara Tupua Alliance Contract (2022).[3]
The project shall contribute to a transport network that is **safe with reduced opportunities for crime** and the fear of crime.	Te Ara Tupua Alliance Contract (2022).

The project also includes CPTED guides in the contract, which have been used to inform this CPTED assessment. Waka Kotahi's contract sets out minimum requirements for the design of Te Ara Tupua[4]. In Section 5.3 – Public Safety and Security the contract outlines:

- 5.3.1 "*Crime Prevention through Environmental Design (CPTED), road safety, and human health (e.g. noise exposure and accessibility included for the mobility impaired) shall be considered in the selection and development of design solutions. The project shall contribute to a transport network that is safe with reduced opportunities for crime and the fear of crime*" and;
- 5.3.2 "*Fencing shall be integrated into the landscape design and highway design to ensure public safety and security*".

Further requirements are set out in Section 8 – Landscape Management Plan. This section looks for demonstration of CTPED principles in relation to:

- *Public spaces (Honiana Te Puni Reserve, car parking areas and the path);*
- *Maintenance requirements and graffiti resistance measures ensuring consistency of appearance across structure faces or components; and*
- *Protected view shafts, character areas and protected heritage items, as identified in the District Plan and those identified in the CEDF;*

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[3] Waka Kotahi (2022).

[4] Waka Kotahi, 2022.

2.0 Receiving Environment

From a CPTED perspective the 'receiving environment' refers to the project Site and the surrounding context, including physical attributes and behavioural patterns. An assessment of the receiving environment is useful for identifying the perceived and actual safety of a Site and understanding how these may be addressed when planning and undertaking the design component of a development proposal.

2.1 Site and Context

The Site is unique in that the Path will provide pedestrian and cycle access along a reclaimed area in the Coastal Marine Area which does not exist in the receiving environment. The Path will link Ngā Ūranga Gorge at the southern end to Pito-One in the northern end, connecting into existing environments. At the Ngā Ūranga end, this is where State Highway 2 meets Hutt Road, next to Ngauranga Train Station. Here there is an existing cycle path for a short portion of State Highway 2, before cyclists merge onto the State Highway.

At the Pito-One end, the Path connects to Honiana Te Puni Reserve East. Historically, this reserve was home to the Ski Club, and is now the site office for Te Ara Tupua Alliance. Cycle and pedestrian access currently runs along the north of the old reserve and provides a link from State Highway 2 north to the nearly opened Pito-One to Melling shared path. The Path will run between Ngā Ūranga and Pito-One, alongside State Highway 2, separated from the road by the Hutt Valley Line. The proposal is the expansion of a movement corridor to allow other modes of transport, so many CPTED principles, such as active edges are not possible to incorporate into the design.

The CPTED context for the Path varies across zones, which are outlined on the contextual site plan provided in **Appendix 3.** These have been identified as:

- New Environments
    - The length of the shared path between the existing gateways
    - The ūranga (built-out rest areas along the Path)
- Existing Environments
    - Honiana Te Puni Reserve East - This is the reserve undergoing an upgrade as part of the project.
    - The southern gateway environment (Ngā Ūranga) - This gateway is outside of the scope of the project but is an important contextual environment as part of the CPTED assessment, as users of the proposed path arriving from or continuing to Hutt Road will use this space.
    - The northern gateway environment (connection to Pito-One to Melling path) - This gateway is inside the scope of the project. It includes the underpass at the Petone Interchange.

2.2 Crime Profile

This project is unique as it is providing pedestrian and cycle access along a movement corridor which does not currently provide for active modes of travelr. Therefore, an assessment of an

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existing crime profile is only relevant for the connecting receiving environments at the Ngā Ūranga and Pito-One gateways.

A review of the Intelligence Data on the NZ Police website[5], in relation to 'Calls for Service' (CFS) to the area surrounding the site has been undertaken for the past year. Meshblocks indicated in ***Figures 1 and 2*** show these statistics for the Ngā Ūranga and Pito-One ends of the site respectively. The findings relating to CPTED specific to each 'Meshblocks' are summarised as follows:

- The Ngā Ūranga Meshblock (illustrated in ***Figure 1***) has low numbers of reports at only 10. None of the reported incidents appear relevant to the site. This result is expected given this area is predominantly an area where people travel through and do not stop, resulting in a space which doesn't attract crime or antisocial behaviour.
- The Pito-One Meshblock (illustrated in ***Figure 2***) has 29 instances of reports. Most incidences captured in the reporting are of 'theft from a retail premises' which would not have occurred within the site. There are three instances of 'assault' and one of 'theft' which could have occurred within the site[6]. These have occurred at varying times of the day.

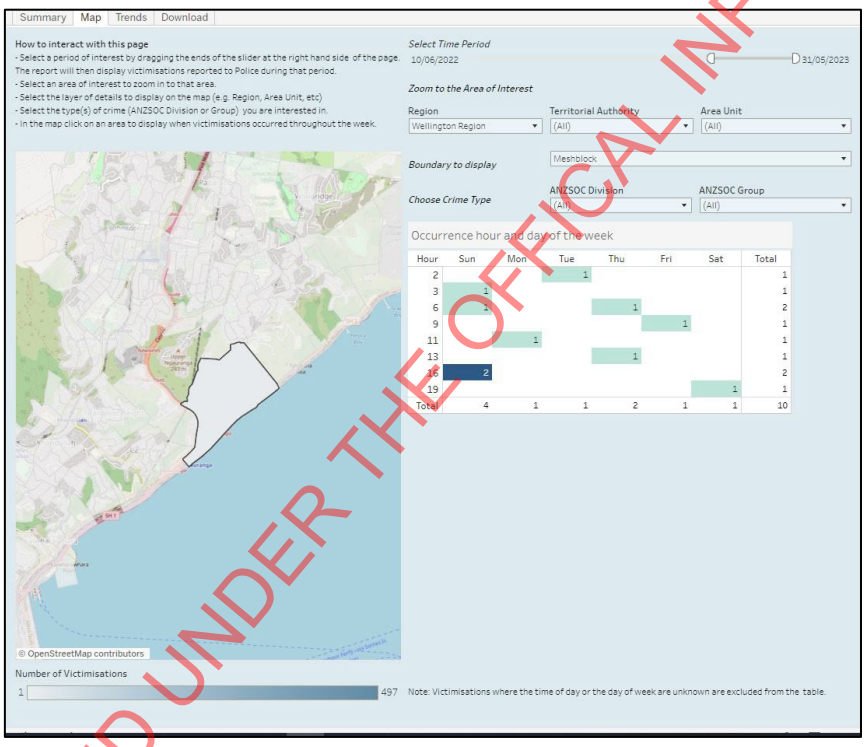

***Figure 1**: Ngā Ūranga Meshblock - victimisation reports*

[5] https://www.police.govt.nz/about-us/publications-statistics/data-and-statistics/policedatanz/victimisation-time-and-place

[6] Noting exact locations of incidences is not available within the data.

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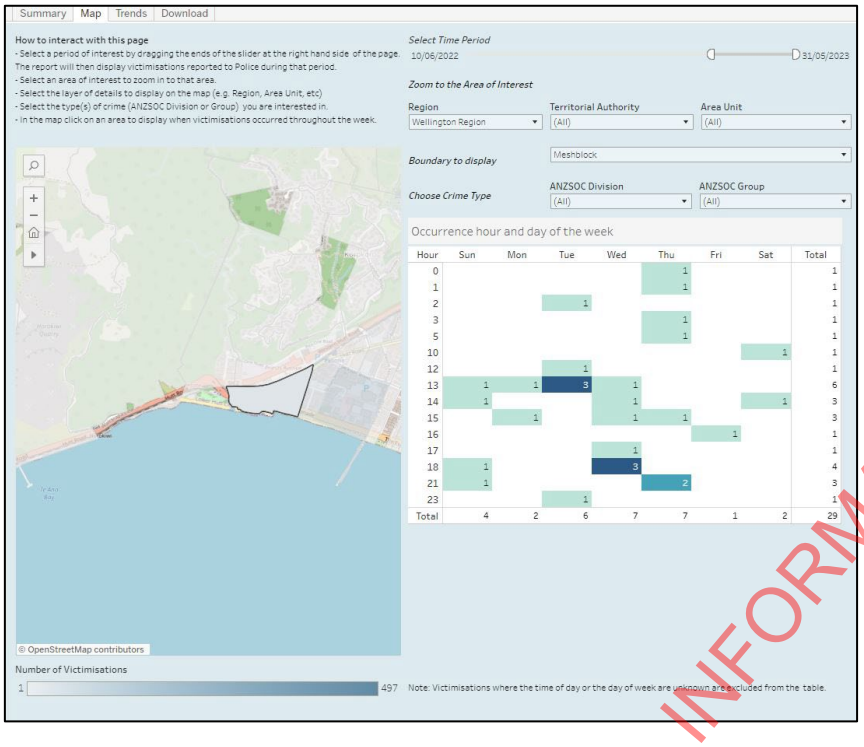

***Figure 2**: Petone Meshblock - victimisation reports*

2.3 User Activity

A large proportion of the receiving environment is not accessible as the proposed path sits to the south-east of the train corridor and will be created with the reclamation of the CMA and construction of the seawall.

Users of the existing cycle access are likely only very confident cyclists who are comfortable with the level of risk associated with using this facility. The current cycle facility is along the shoulder of State Highway 2 without separation from vehicular traffic travelling at a speed limit of 100kmph. In recent years, there has been one cycling fatality along this stretch of road, highlighting the danger of the route.

The Northern gateway of Te Ara Tupua starts in Honiana Te Puni Reserve. It currently links the Petone Esplanade shared path to Hutt Road near Petone Train Station via an underpass and a bridge over Korokoro Stream. This route is currently used by cyclists and pedestrians, both for commuting and casual bike rides and walks. It is likely not well-used at night due to the poor-quality environment.

Honiana Te Puni Reserve is shut for construction. The reserve was home to the ski and rowing clubs and associated with these users. It is also a popular destination for walking, dog-walking and cycling.

2.4 Summary of Site Visit

A day-time site visit was undertaken on 4th July 2023 between 2.30pm and 4.30pm, with a night-time site visit undertaken on 11th July between 5pm and 6pm. The weather was clear and still on

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both days. Most of the site is impossible to access and will be constructed on future reclaimed land. The site visits accessed:

- The northern end of the Path, including the Petone interchange underpass and the bridge over the Korokoro Stream ("Pito-One Gateway").
- The southern end of the Path, where the separated cycle path meets Hutt Road and Ngauranga Train Station ("Ngā Ūranga Gateway").
- The length of the site was observed from a train during the day (currently the only way of viewing the future path site), and from a car at night .

The following key points were observed:

2.4.1 Ngā Ūranga Gateway (Day):

- Car-dominated environment that is unwelcoming to pedestrians.
- Motorway infrastructure has resulted in large dominating flank walls which creates a poor human-scale environment, resulting in a feeling that active transport users are not considered in the design (***Figure 3***).
- Strong smell of human waste due to adjacency of caravan dumping station.
- Poor wayfinding to both Wellington central and Ngauranga Train Station.
- Poor pedestrian and cycle access to Ngauranga Train Station. It is not signposted, with narrow paths, an underpass, and high chain-link fences.

2.4.2 Ngā Ūranga Gateway (Night):

- Same issues but perpetuated by darkness due to limited lighting.
- Tall chain-link fencing separates the pedestrian and cycle entrance to the Train Station from the vehicular entrance which crosses the dumping station. Correct access point is especially unclear at night.
- Both male and female CPTED specialists felt uncomfortable walking in this area in the dark.
- One cyclist used this path access (northbound) during the visit.

2.4.3 Pito-One Gateway (Day):

- Poor vegetation maintenance creates perception of bad surveillance and management in the area leading to feelings of unsafety.
- Path underpass is dark. A bend in the path means there is no sightline in and out of the underpass entrance.
- Narrow bridge over Korokoro is not suitable for safe movement of multiple modes travelling in opposite directions.
- Mural on underpass has added some vibrancy.
- Two cyclists used this path (northbound) during the visit.

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2.4.4 Pito-One Gateway (Night):

- The same issues were observed but perpetuated by darkness due to limited lighting.
- No lighting at underpass makes this a completely hostile environment in the dark – especially when approached from the north (**Figure 4**).
- Two cyclists used this path (northbound) during the visit.

2.4.5 Corridor:

- Train line separates walking and cycling completely from vehicular movement.
- At night, lighting from State Highway 2 does not reach the other side of the train tracks.

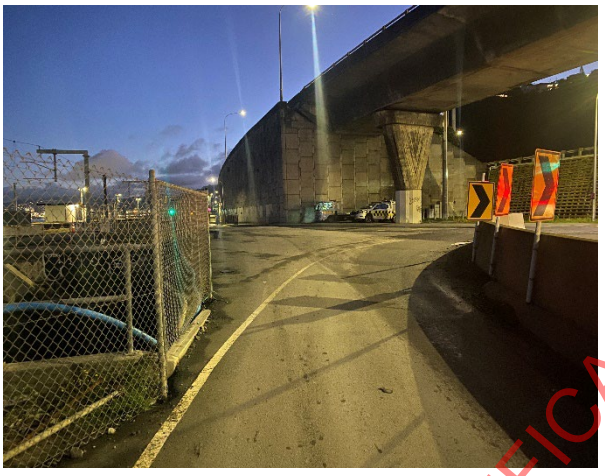

***Figure 3**: Ngā Ūranga End - Motorway infrastructure is dominating and not human-scale*

***Figure 4**: Petone End - Path leading to underpass is unlit and unwelcoming*

2.5 Summary of Receiving Environment Findings

The following summarizes the key CPTED findings for the Receiving Environment and this is illustrated in the CPTED graphic attachment plans, attached as ***Appendix 2***. This is useful background to inform the project including future maintenance and communications strategies:

- Southern pedestrian and cycle access – the Ngā Ūranga gateway has a poor existing environment quality for the entrance to the Site. This area is particularly uncomfortable in the dark due to its isolation, lack of supervision and activation and hostile design which was not intended for pedestrian access. There is a potential desire-line for users of the Path between Ngauranga Train Station and the path exit, but this area has very poor environmental quality from a CPTED perspective. Whilst the scope of the project does not extend to Ngauranga Train Station nor this underpass, users of the Path must go through this environment to access the Path. It is therefore considered this area is contextual in the wider receiving environment and poses significant CPTED concerns.
- Northern pedestrian and cycle access – the Pito-One gateway has a poor receiving environment that requires improvements under the interchange underpass and along Hutt Road before it reaches the new Pito-One to Melling Path. Poor sightlines in the underpass contribute to a sense of isolation. The

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dominating infrastructure of the underpass design creates a feeling of a dark and unsafe environment at all times of day. The poor maintenance of vegetation further enhances perceptions of limited surveillance of the area. Enhancing this stretch of Path will improve perceived safety of cyclists and pedestrians, so it is an essential stretch to encourage active travel uptake on both the proposed Path and the existing.

- Activation and natural supervision –Currently only a small number of cyclists use the existing infrastructure due to the traffic and isolation risks for cyclists. The train provides some perception of natural supervision along the Path; however, it travels too fast for any meaningful supervision, nor would users act if an incident occurred. The Path will also be seen from vehicles travelling along State Highway 2 but given the speed at which vehicles travel and the distance from the Path, precludes supervision.
- Night-time environment – there is currently no lighting within the Site boundaries which includes both gateways to the Path. The wider receiving environment (State Highway 2) has lighting, but there is no spill-over lighting from the State Highway.
- Quality environment – both gateways to the Path have a poor-quality environment due to being dominated by roading infrastructure, these areas have not been designed to accommodate active modes of transport, nor pedestrians.

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3.0 The Proposal

The design for Ngā Ūranga ki Pito-One provides for a 4.5km shared path on the south-east side of the Hutt Valley rail corridor. As outlined earlier, much of the land upon which the Path will sit will be areas of reclamation. Te Ara Tupua is a significant infrastructure project that will transform this stretch of coastline with ecological benefits. The proposed path will play a significant role in enabling cycling and walking as a valid transportation option between Wellington and the Hutt Valley.

The overall safety of the project will be influenced by the perceived and actual risks to safety of people using the cycleway, influencing levels of use. Given the limited ability for adjacent infrastructure to provide activation and supervision, the usage levels of the Path become more important in influencing overall safety. It is acknowledged that due to the existing movement corridor, the Path only has access at each end of the 4.5km corridor and additional entrances (or in CPTED terms 'escape routes') cannot be provided. Typically, a new shared path of this scale would enable more entrance and exit points, which cannot be considered in this location and circumstance. This means there will always be residual CPTED risks associated with the project, which will mean a small group of users may not feel comfortable using the Path and there will be a need for monitoring of the Path.

A key aspiration for Te Ara Tupua is that less confident cyclists will be able to cycle between Wellington and Petone as there will be no mixing with vehicular traffic. The Path will also enable pedestrians to walk between Wellington and the Hutt Valley along the coast where they currently cannot. The Path has ūranga, or small build-outs, which means casual or less-able walkers and cyclists will be encouraged to walk sections of the Path, without feeling the need to travel the whole path. It is anticipated this design will attract a variety of active users including commuters, exercisers and casual users just getting some air.

The overall objectives[7] of the project include:

- Safety and mode shift – It aims to provide user comfort by making walking and cycling a viable option along the State Highway 2 transport corridor. User comfort from a CPTED perspective is vital to achieve this objective, to create activation along the Path and increase perceived safety and therefore user activity.
- Connection and integration – It aims to connect missing links in the planning of Wellington and Hutt City's walking and cycling network. Considering key CPTED principles such as surveillance and quality environments are critical to the success of this connection.
- Transport Resilience – It aims to provide viable transport choice along this movement corridor. Considering key CPTED principles such as surveillance and access management contribute to the strength of this project as a resilient option.
- Environmental Impacts – It aims to improve social, cultural and ecological impacts in this environment. This is important, as the proposal has been designed primarily as ecological infrastructure, with a path attached. CPTED design principles are not always compatible with these design features, so a CPTED assessment ensures all viable

[7] These have been derived from Page 8 of the Cultural and Environmental Design Master Plan (2023).

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design considerations from a CPTED perspective have been applied to the ecological features.

At the southern end the Path will connect the existing cycle route along Hutt Road (near the SH1 and 2 interchange) . At the northern end in Petone the Path will connect with the nearly-opened Pito-One ki Melling shared path and have another connection through Honiana Te Puni Reserve (also linking the Path to the esplanade). Honiana Te Puni Reserve is also being upgraded as part of the Project.

The Path will have multiple design features, including:

- A bridge;
- Artworks;
- Ūranga (build-outs with landscape features for rest, cultural experience, ecological information and views); and
- A major seawall, with multiple ecological benefits. This means design considerations are influenced by ecological factors, as well as best-practice shared path design.

4.0 CPTED Assessment

4.1 Overview

This CPTED assessment considers the proposal against assessment criteria set out in ***section 1.5***, which includes the National Guidelines for CPTED (2005). This assessment considers the following high-level contextual CPTED matters, which include:

CPTED Principles:

- Surveillance – people are present and can see what is going on. This is critical for the proposal as it is along a transport corridor with no active edges.
- Access management – methods are used to attract people and vehicles to some places and restrict them from others. CPTED plays a key role ensuring users are comfortable accessing the proposal.
- Territorial reinforcement – clear boundaries encourage community 'ownership' of the space. This helps contribute to user comfort, through interventions such as wayfinding, particularly for those using the space for the first time.
- Quality environments – good quality, well maintained places attract people and support surveillance. This is vital to ensuring the success of the Path in meeting the proposal's objectives.

National CPTED Guidelines:

- Access: Safe movement and connections – A well-defined, coherent route with safe access points is critical to feeling safe on the Path.
- Surveillance and sightlines: See and be seen – With no existing active edges along the Path, surveillance is key to providing a sense of passive security.

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- Layout: Clear and logical orientation – A clear and logical layout, with no areas for concealment enhances perception of safety.
- Activity mix: Eyes on the street – Designing with CPTED concerns in mind can increase usership and the level of activation, contributing to a reduced risk of crime.
- Sense of ownership: Showing a space is cared for – Brining a sense of ownership pride and community to the Path increases users and deters risk of crime.
- Quality environments: Well-designed, managed and maintained environments – A well-designed path with high quality interest points along its route (which are maintained) promotes a sense of safety.
- Physical protection: Using active security measures – Necessary security features are included and visible.

4.2 Key CPTED Principles

In general, it is considered the design of Te Ara Tupua has considered CPTED principles throughout the design phase, and that is evident in the detailed design and the creation of the Cultural and Environmental Design Master Plan. Below is a brief summary of the four key CPTED principles and how it is anticipated they will influence the Path's design and how they are relevant to promoting a safe environment.

4.2.1 Surveillance

Due to the location of the Path to the south-east of the rail corridor and no active edges, supervision of the Path will only occur through other path users. Therefore, the Path must be designed to encourage as many users as possible and anticipate how users will feel at all times of the day. It is anticipated that most users will feel comfortable using the Path by day and that it is likely the Path will be less used at night.

The activation from the Path itself being the only possible supervision means that supervision is less reliable than when supervision comes from external sources (buildings, roads etc). Additionally, the site has only highway and rail corridors, resulting in a somewhat isolated Site. For this reason, potential users may fear using the Path, should anything go wrong, and if there is not reliable supervision from other users in lieu of "escape routes".

The dual access (cycling and walking) means that good visibility and sightlines are essential to reassure users that surveillance along the Path is achieved through its design. Routes which are clear, well-lit, well maintained and eliminate concealment and entrapment spots is important. The design largely achieves this.

4.2.2 Access management

It is considered the gateways play a pivotal role in ensuring access management contributes positively to the CPTED outcomes of the Path. Given the route has not been accessible for pedestrians, and only accessible for a small user-group of cyclists, the receiving environment has not been a priority for active mode users and has not been designed as such. Reflecting this, both gateways have poor receiving environments and the project only has limited scope to improve them, which means other mechanisms such as a communications plan will be essential in improving the safety of access. ***Section 4.2.2*** discusses wayfinding in more detail, this will be an important part of access management.

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4.2.3 Territorial reinforcement

Honiana Te Puni Reserve has private vehicle (swipe card) access. The road has been designed (through signage and street layout that encourages slow speeds) so cars anticipate the presence of cyclists and pedestrians, and likewise that active users are aware of vehicle use. Honiana Te Puni reserve allows access to some private motor vehicles, design techniques are required to distinguish and prioritise active mode users and ensure their safety and comfort and eliminate concealment spots created by cars and car parking.

There are two car-park spaces along the Path for KiwiRail maintenance access, as well as a control building. These areas do not appear to be fenced off which creates a possible tension between the clarity of which space allows public or private access. These KiwiRail access points have been designed to be distinct from the ūranga, limiting perception of them as areas intended for public access.

4.2.4 Quality environments

High-quality, well-maintained environments attract people to use the infrastructure. The new pathway achieves this through a high-quality design which carefully considers design layout and high-quality materials.

As mentioned, the receiving environments at each gateway are a CPTED risk, and these areas are outside the scope of the project, however these areas influence the pathway users experience. As well as high-quality materials (such as anti-graffiti materials), a maintenance plan will be essential in ensuring the environment remains high-quality and is perceived by users to have ongoing surveillance.

Target hardening will be important for artworks and installations. The higher crime statistics in Petone indicate a possibility for design features of the Path to becomes targets for wilful damage, which could negatively impact the perceived safety of the proposal.

4.3 Wider site-specific CTPED considerations

Based on the review of the receiving environment against the above principles and Waka Kotahi's contractual CPTED considerations, it is considered the wider CPTED considerations for this project are:

- User comfort
- Wayfinding
- Assurance of connectivity
- Lighting
- Visibility
- Landscape treatment
- Physical protection and active safety

This section of the report discusses how these wider CPTED elements have been considered by the design, how they relate to the four key CPTED principles, and if there are any outstanding CTPED concerns or risks.

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4.3.1 User comfort

The overall goal of the Project is to contribute to mode shift and encourage users of all ages and abilities to walk or cycle along Te Ara Tupua. As such, user comfort is considered key in attracting people and in turn providing activation and supervision. The key aspects of the project which contribute to user comfort include:

- Provides space and design cues to separate cyclists and pedestrians and allows adequate space for user error. From a CPTED perspective this assists in reducing opportunities for user conflicts (as shown in ***Figure 5***).
- The cultural artworks and narrative integrated into this design, through co-design and partnership add strong elements of cultural connection and/or exploration which allows the user to feel welcome in the space.
- The seven ūranga not only add resting spots for those less mobile but assist with the legibility of the route and provide for regular points of interest to break up the journey along the Path. Inclusive seating (including hand rests) which add to user comfort and ability to rest for all users. The intermittent spacing of the ūranga provide destination opportunities for users to complete "return walks" as identified in the Cultural and Environmental Design Masterplan (CEDMP), rather than needing to walk/cycle the whole path. The creative and inclusive design of the ūranga provide a quality environment to attract more users and support surveillance along the Path, increasing user comfort.
- User comfort will also be enhanced by an understanding of where they are along the Path, knowledge of where they are going and lighting. These elements are addressed in more detail in *4.2.2 Wayfinding 4.2.3 Assurance of connectivity* and *4.2.6 Lighting*.

Figure 5: Tahataha Roa uranga provides cultural narrative, places to rest and is access from the slow lane. Image source: Ngā Ūranga ki Pito-One – Cultural & Environmental Design Master Plan (CEDMP), 2023.

4.3.2 Wayfinding

At 4.5 kilometres long, wayfinding along the Path will play an important role in user comfort. Most users will have only travelled this route by train or car, and the length to walk or cycle the

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route may be underestimated. The greatest CPTED concern about the Path is that it only has entrance and exit points at each end of the path. A wayfinding strategy for the Path is critical and should include information about the distances and time it takes to exit the pathway.

Wayfinding and signage are also key components to access management and territorial reinforcement, allowing users to understand the layout of the project. Wayfinding helps with user comfort in regard to escape from natural hazards – ranging from minor, such as unexpected rainfall or severe wind exposure to major events, such as tsunamis. As these events are a natural occurrence, and often unpredictable, they cannot be resolved in the design. Possible closure of the Path in severe weather events should be clarified in the communication strategy.

It is indicated that each ūranga has a wayfinding map, allowing users to place themselves along the Path at these intervals. Detailed Furniture Plans indicate wayfinding maps are provided at Piki Wahine Point and Honiana Te Puni Reserve (Figure 6). Tahataha roa, Paroro-rangi Point, Karanga point, Te Ana Bay, Horokiwi A and Horokiwi B all have other forms of signage, such as a cultural narrative board (see **Figure 7**). The Detailed Furniture Plans indicate directional wayfinding will be included on these narrative panels which is considered essential.

It is recommended there are regular wayfinding signs that indicate the length (distance and estimated walking time) to each end of the Path, as well as the distance and approximate walking times between the ūranga. The plan suggests these key naming and distance signs will be located at each ūranga (see **Figure 8**), however it is recommended more are provided along the route, especially where there are large distances between ūranga, for example: between Piki Wahine Point and Tahataha Roa or between Karanga Point and Te Ana Bay (see **Figure 9**)

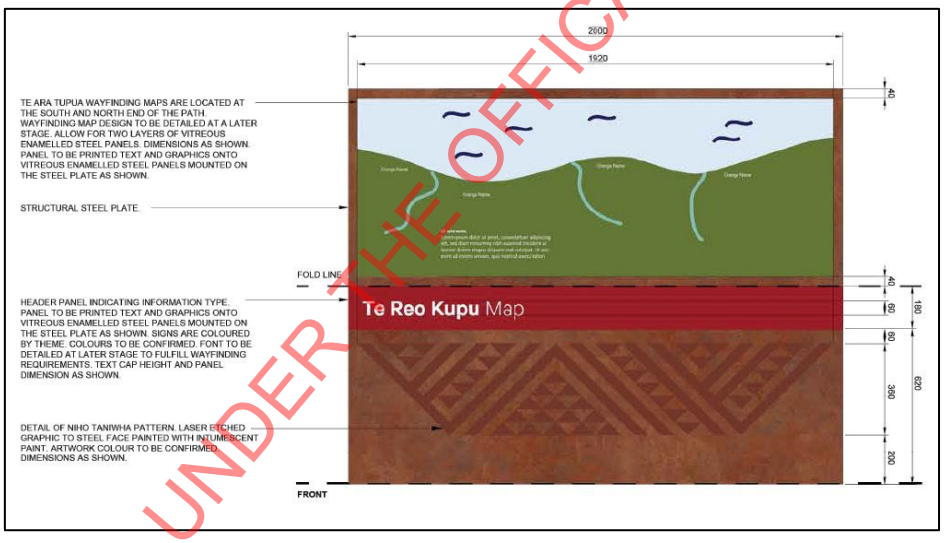

Figure 6: Wayfinding maps at Piki Wahine Point and Honiana Te Puni Reserve

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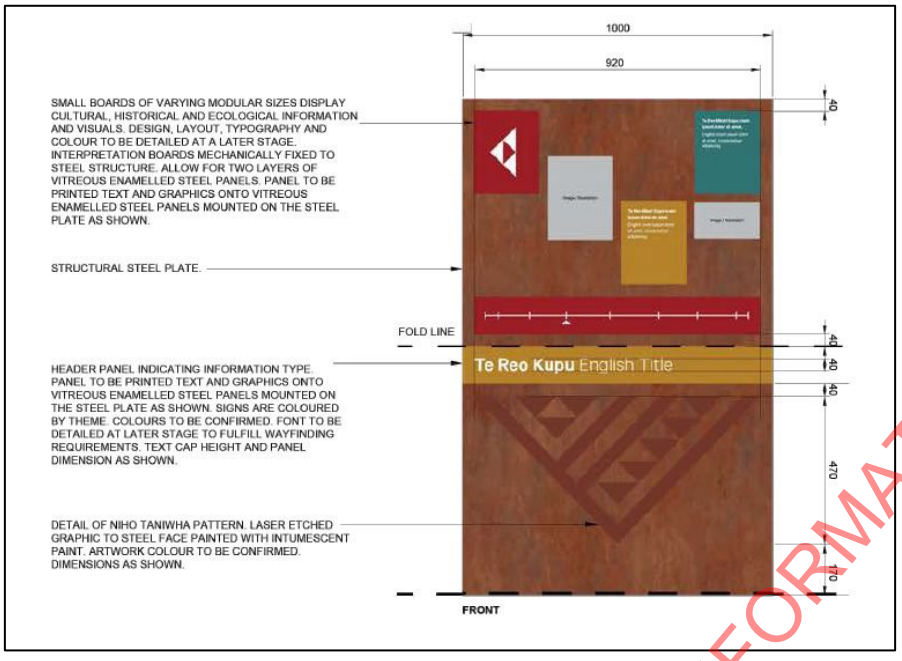

Figure 7: Cultural narrative maps at all ūranga

Figure 8: ūranga identification with directional wayfinding

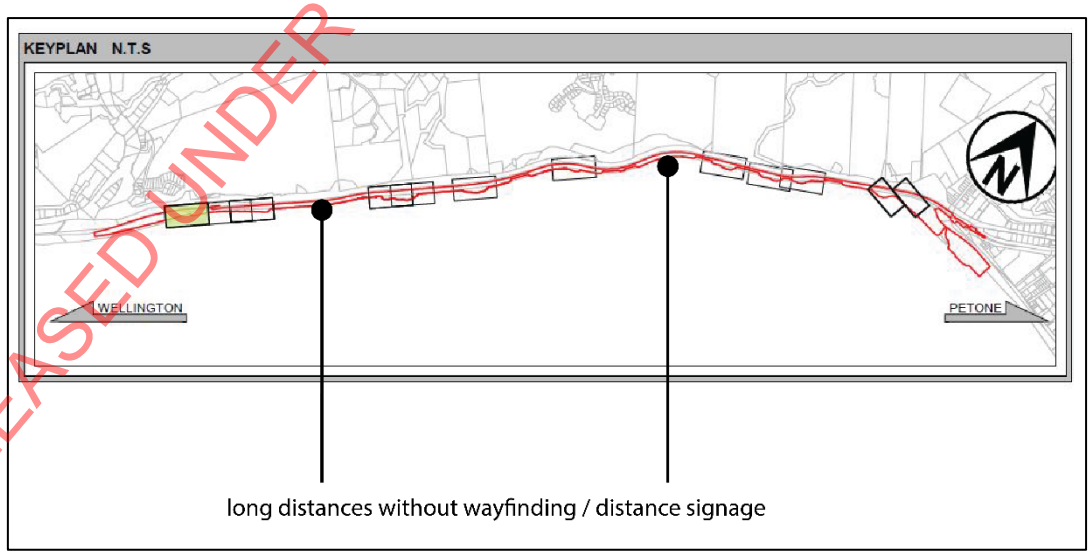

Figure 9: Stretches of path with no wayfinding signage

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4.3.3 Assurance of connectivity

At 4.5km long, users of the Path must be assured that they know what is at the other end of the Path, and that they will safely be able to connect on to other destinations. For example, a less confident cyclist may only wish to use the Path if they are sure the route is completely separated from traffic at the other end. Not understanding a path's connections or end environment can deter users from entering it. Assurance of connectivity requires access management, and when achieved will contribute to natural surveillance.

Wayfinding maps at the Path's beginning and end should be clear about how the Path links into the surrounding active transport network. For example, a map showing the Hutt Road connection to Wellington City should not only be provided at the Ngā Ūranga end, but also the Pito-One end, to assure users of safe connection into the wider network if accessing the Path from the north.

Assurance of connectivity also includes temporary closures and changes. Users must be assured the Path is open and active to enhance user comfort and safety. This assurance of connectivity is required not only on site, but earlier in the active transport network and online, to warn users. It is recommended there is a communications plan installed to detail how users will be alerted about any temporary closures and provide alternative travel plans. For example, if the Path is shut, users should be notified before reaching the Path's gateway to be able to plan ahead. The semi-isolated gateways, particularly at the Ngā Ūranga end could provide discomfort if a user cycles 20 minutes from Wellington City to find the Path is shut. It is therefore recommended Waka Kotahi designs a communications strategy for temporary closures, including both physical and online plans. This would include temporary signage along connecting cycle paths and social media updates, such as the example in **Figure 10**.

Figure 10: An example of Waka Kotahi's online (Twitter) communications outlining planned route closures

4.3.4 Lighting

The current environment (Site) does not benefit from the lighting along State Highway 2.

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Sensor lighting is proposed along the path on light poles at regular intervals ("feature posts" on the plans). Feature lighting is proposed in the ūranga on lighting posts and it is important to ensure the ūranga are visible along with the route, and do not become spaces of concealment at night.

For such a major pedestrian and cycle path where use after dark is anticipated (specifically for commuters in winter), it is critical that well-designed lighting provides visibility where facial recognition is possible from a reasonable distance ahead. It is considered the path would benefit from a constant and even light level along its length of the corridor as opposed to sensor lights as users travel along the path. This provides users reassurance that the path is positively managed and provides a safe night-time environment. A constant, lit lighting solution is provided on the popular Te Ara I Whiti in Auckland, showing how lighting can be integrated into the design to create activation and interest, as well as enhance safety (see ***Figure 11***).

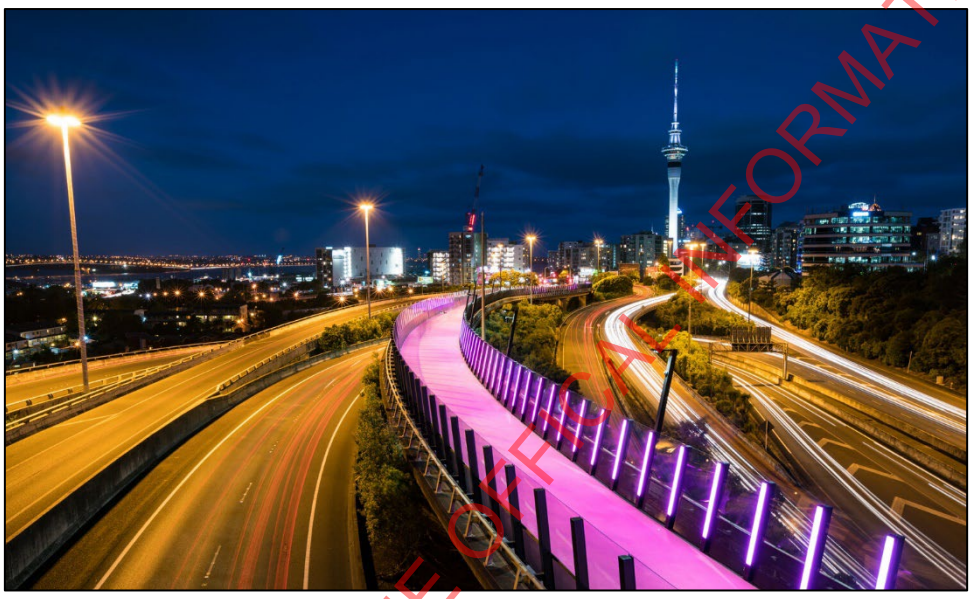

Figure 11: Colourful lighting on Te Ara i Whiti in Auckland is an integrated part of the design

Pito-One ki Melling continues under the Petone interchange, where there is currently no lighting. Lighting plans for this part of the Proejct have not been provided. It is considered that day and night lighting could assist with the feeling of discomfort during daylight. The new connection to the underpass will eliminate the bend in the existing path, meaning this area will be more comfortable for night-time use and should be consistently lit like the rest of Te Ara Tupua. It is recommended that lighting plans are provided for this end of the path.

It is also recommended that the applicant develops a lighting strategy which considers CPTED in more detail, including the gateway areas and where the existing path goes through the underpass. This lighting strategy should include lighting type, lux level and spacing.

4.3.5 Visibility

Clear sightlines and good visibility allow people to see where they are going and make them feel comfortable on the route. As the Path only has two access points at the north and south end, visibility along the Path is critical for a sense of security and safety. Clear sightlines therefore have a significant impact on feeling and being safe and contribute to surveillance of the Path. The visibility of the following key areas is considered in more detail as critical parts to the corridor:

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a) **Over-bridge** - The Path is relatively straight, with the only major bend on the new structure at the bridge where the Path crosses the rail corridor at ***Figure 12***. The angle of the bridge has been well designed to maintain a clear sightline. Semi-permeable fencing materials do not obscure sightlines over the change of levels while retaining safety (see **Figure 13**).

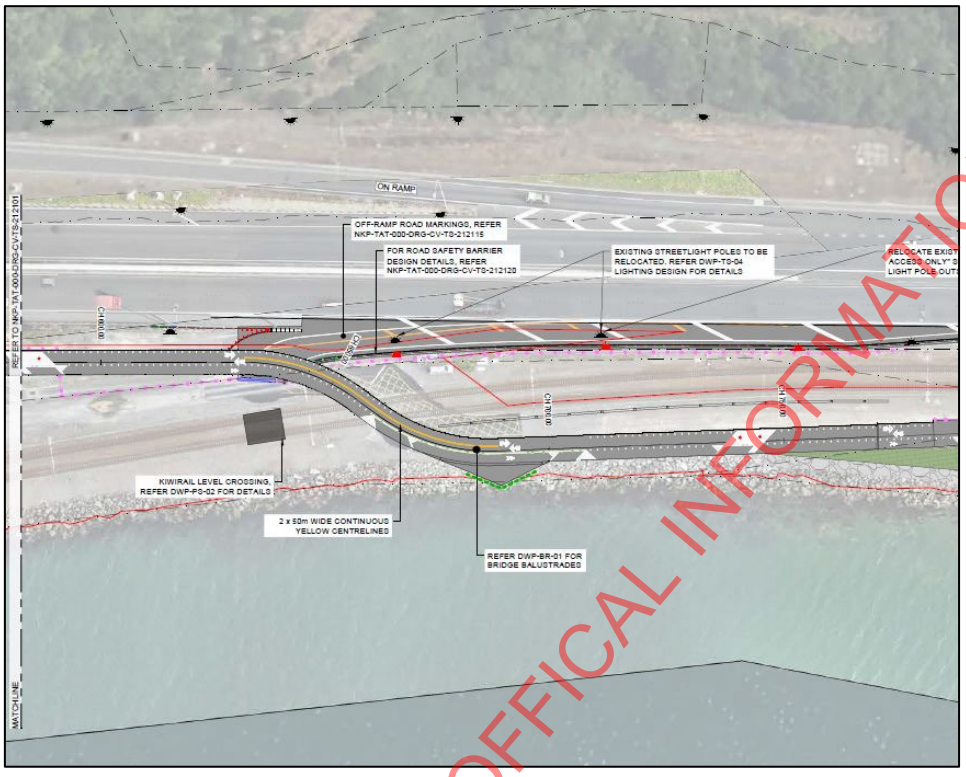

Figure 12: The bridge over the rail corridor creates a small bend in the path

Figure 13: Balustrade is semi-permeable to enable clear sightlines around corners and over level change

b) **Ecological sea-wall** – A chain-link fence runs along the length of the rail-corridor. The path is largely open on the seaward side, but ecological design creates sections of path where a screen runs along portions of the path above head height. The chain-link fence is permeable and creates and open feel. Where there is an ecological screen, it has

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been designed with breaks to reduce the feeling of enclosure. While it would be preferred to include glass panels to reduce the sense of enclosure, it is understood this screening approach is required for ecological enhancement of the beach below (and the birds who use it). Cultural patterns have been designed into the screen to reduce the dominating feeling of infrastructure made from a sturdy materiality. The screen also slopes outwards, enhancing the sense of openness. While a screen creating an enclosed path is a sub-optimal CPTED outcome, it is considered the design has achieved a balance of meeting the ecological needs and incorporating design features that minimise CPTED risks. It is further considered that permanent lighting at night (not sensor activated) will be critical to ensure this space feels safe after dark.

Figure 14: Indicative ecological screen along portions of the Path

c) **Petone interchange underpass** – The Project will widen the existing path (to 5m from the rail corridor) and cut through the existing lawn and vegetated area to create clearer sightline through the underpass. A choice to exit to the esplanade path provides options for users who do not feel safe continuing under the underpass. It is understood some trees will be removed to construct this new path, but some of the bush area will remain. The CEDMP at page 134 specifies that "*Existing trees will be limbed up and vegetation removed where required to address safety issues due to lack of visibility or impeded sight lines*". A maintenance plan will be essential to ensure this is achieved and the situation maintained over time.

Figure 15: Petone interchange underpass, where the path will continue straight ahead

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The existing environmental quality could be further enhanced by introducing some softer materiality and introducing lighting to increase user comfort. It is recommended a render is provided of the new underpass environment to have a better understanding of the sightlines of the proposal, and the anticipated impact of the vegetation on future sightlines, so that an appropriate lighting and maintenance plan can respond to the new environment. As an example, some of the receiving environment has poor vegetation maintenance (***Figure 16***), which contributes to the perception of a poor-quality environment with poor surveillance, resulting in residual CPTED concerns. As a vital connection between two new, high-amenity paths, it is considered the receiving environment will need an upgraded higher-amenity environment to mitigate outstanding CPTED risks.

Figure 16: Poor vegetation clearance along the existing path to the north of the interchange

d) Ūranga – The ūranga provide breaks along the Path, but also an opportunity for obscured sightlines. It is considered that this risk has been well considered in the design of the ūranga. All ūranga have multiple entrance and exit points, and the rest spaces are all visible from the Path. The plans suggest there are no blind corners or concealment spots. Planting plans show that vegetation is low. Therefore, it is recommended a maintenance plan ensures planting remains trimmed and unobstructive.

e) Vehicles in Honiana Te Puni Reserve: Vehicles create opportunity for temporary spots of concealment. The (swipe card only) parking and vehicle access in Honiana Te Puni

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Reserve is largely in open spaces, which will not likely create unsafe spaces of concealment or entrapment (whether empty or occupied with a parked vehicle) .

f) Concrete maintenance bay and utility building: The Path design has included space for parking KiwiRail vehicles indicating occasional required entry along the Path by private service vehicles. It is not clear if these parking spaces will be closed off when not in use. Fencing treatment would clarify territorial reinforcement and reduce areas of concealment along the Path. The utility building along the path provides a similar concealment opportunity. It is recommended both areas are fenced off to provide clear boundaries around access and reduce concealment spaces.

Figure 17: Parking spot for KiwiRail maintenance vehicles along the path

4.3.6 Landscape treatment

Planting provides interest and contributes to environmental quality along the route, both in the ūranga and at Honiana Te Puni reserve. Landscape treatment in the ūranga contributes to a high-quality environment and provides points of discovery and interest, to attract more users and therefore improve surveillance. Maintenance of vegetation is critical to ensuring sightlines are unobscured and the site retains a high-quality environment. It is recommended a maintenance plan be explicit about CPTED concerns, as addressed in the contract at 8.1.6(d). Maintenance should include tree trimming, sweeping, replacing dead plants, and litter and graffiti clearance in a timely manner. It is also recommended a communications strategy provides opportunity for users to report maintenance issues, such as overgrown vegetation and need for sweeping. Such a reporting system helps to provide confidence in users that their safety is of concern.

4.3.7 Physical protection and active safety

While the CPTED elements listed above are considered most important in the design, physical protection can provide assurance that safety measures are in place. CCTV is being provided along the route. The plans are unclear as to whether the CCTV will be permanently monitored

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and actively managed, which is the recommended approach. Further, it is considered CCTV is only beneficial when lighting is adequate enough to provide facial recognition. It is understood that the cameras will not be signposted but will be obvious to the user. It is recommended signage at the Path's beginning and end (at each gateway), indicates that the area is monitored by CCTV, and lighting is designing with the CCTV locations in mind. More intensive active management is also recommended in the first 6 months to a year to send a clear message that the pathway is managed and to also understand any safety risks post construction.

4.4 Residual CPTED Risks

The following residual CPTED risks have been identified for the proposal:

1. There are inherit CPTED risks of entrapment within the cycleway due to the 4.5km long linear space without 'escape routes'.
2. The receiving environment of the Ngā Ūranga gateway has a harsh environment quality due to dominating concrete infrastructure. Additionally, the lack of supervision and activation due to the somewhat isolated location furthers the CPTED risks for this area.. Noting that this area is outside the scope of this project, it is recommended that the Alliance works with Waka Kotahi and Metlink to improve this connection and provide a quality arrival environment. This is important in providing safe access for users of the Path as they exit the pathway and travel north.
3. The treatment and design of the Petone interchange underpass remains unclear. This area poses significant CPTED risks due to the isolated location, poor supervision and low environmental quality. Noting that some of this area is outside the scope of this project, it is recommended that the Alliance works with Waka Kotahi and KiwiRail to improve this connection and to provide a quality arrival environment.
4. The lighting information is not considered sufficient to enable a full assessment of the safety of this environment at night. Further consideration of the lighting from a CPTED perspective is recommended.
5. There is a lack of frequency of wayfinding signage along the Path. Additionally, communications for network continuality and closures will be critical and needs to be coordinated with the wayfinding strategy.
6. Assurance of connectivity and a communications strategy for when the Path opens are unclear, leaving risks of users stuck in unfamiliar territory within poor receiving environments (particularly at the Ngā ūranga gateway). The communications strategy should be integrated with the wayfinding and maintenance plans.
7. Maintenance of vegetation and lighting will be vital to creating clear and unobstructed sightlines along the Path.

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5.0 Conclusion and Recommendations

5.1 Conclusion

Whilst CPTED mitigative measures can be taken to promote a high-quality environment which attracts people and provides some levels of self-supervision, CPTED risks in a space of this nature cannot be completely eliminated through the design.

In summary, the design process to date (including engagement with stakeholders) has incorporated best-practice CPTED principles into the design to address CPTED concerns as much as practically possible. This report provides additional considerations as part of an external review to ensure all considerations have been incorporated into the design. The landscape design strategy and cultural narrative are of a high standard and quality, meaning the Path will be attractive to recreational walkers and cyclists at all times of day, as well as commuters, adding to surveillance and user comfort.

However, this project has a considerable design constraint which limits the ability for CPTED to fully address the risks to personal safety of users of this facility. The existing infrastructure, narrowness of the corridor and geographical constraints of the Site mean that 'escape routes' cannot be easily integrated into the design. This results in an environment with limited activation/supervision opportunities, and no exit for the 4.5km route.

The receiving environments at each end of the Path, particularly the southern end at the Ngā Ūranga gateway, are poor quality areas with significant CPTED concerns. Whilst these areas are outside the scope of this project, it is vital to the success of the Path that these environments are improved to match the standards of the Project and encourage a variety of users. It is anticipated the Path will be regularly used after dark by commuters in winter and the environment of the underpasses at each gateway are a likely deterrent for users.

There are outstanding CPTED concerns with this project, which may be resolved by more detailed plans not reviewed as part of this assessment. This includes details around the lighting of the path, and the design improvements for the Petone interchange underpass. A series of recommendations are provided below to ensure these residual risks are addressed. Due to the structure and layout of the existing receiving environment, it is acknowledged that not all CPTED risks can be addressed, most significantly, adding additional escape routes.

5.2 Recommendations

A number of CPTED risks have been outlined in this report and the following recommendations should be considered by Te Ara Tupua Alliance. The key priorities to be considered in the final design and project implementation phase include:

- Providing a render of the planned changes for the Pito-One gateway, as it pertains to the underpass for further CPTED assessment. This area requires further CPTED input to address risks.
- Providing a maintenance plan, for cleaning and landscape maintenance that ensures the Path remains a high-quality environment
- Increasing the frequency of way-finding signage that indicates the distance to each gateway of the Path.

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- Providing a communications plan for Waka Kotahi to inform the public of planned closures. This plan should include:
    - Online communications (for example, a social media strategy, and other information channels such as a subscription to text updates informing of path closure).
    - Immediate on-site communications (for example, wayfinding signage to other transport options at the gateways should the Path be closed).
    - Off-site communications ahead of the Path (for example, signage at likely journey beginning points, such as Thorndon Quay/Hutt Road cycleway or Melling to Pito-One shared path).
- Install signage at the path's entrances indicating the Path is CCTV monitored.
- Ensuring CCTV locations align with adequate lighting and the site is actively managed for the initial commission phase (for 6 months) to fine tune risks.

This report also highlights broader CPTED risks in the wider context of the project which are recommended be considered by the Alliance (noting these are outside the scope of the Project):

- Working with Waka Kotahi to improve the Ngā Ūranga Gateway, specifically:
    - Increasing safety after dark.
    - Creating a more human-scale environment at the SH1/SH2 underpass.
    - Improving connectivity to Ngauranga Train Station.
- Widening the bridge at the Pito-One Gateway.

5.2.1 CPTED Lighting Recommendations

A holistic and creative lighting strategy is important in creating a safe night-time environment. Well-resolved lighting creates a sense of quality and safety at night, reinforces way-finding and allows for good levels of supervision. The lighting design should consider the following in supporting positive CPTED outcomes:

- Lighting is integrated and blends with the surrounding environment;
- Lighting is provided consistently along the Path to indicate it is intended to be used by the public at night and to avoid concealment.
- Different lighting methods are used to achieve subtle, ambient lighting which minimises light-poles (cluttering the environment);
- Lighting of external spaces and adjacent features should be complementary, avoiding dark spaces or foregrounds to lit features; and
- Creates visual interest and a higher environmental quality at night by highlighting features and artworks (using a variety of lux levels, light warmth and the visual appearance of the luminaires).
- Lighting supports the use of CCTV and has full facial recognition from 30m.

6.0 References

Ministry of the Environment. (*2005*) The New Zealand Urban Design protocol.

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Ministry of Justice (*2005*). The National Guidelines for Crime Prevention Through Environmental Design in New Zealand. Part 1: Seven Qualities of Safer Places. *https://www.justice.govt.nz/assets/cpted-part-1.pdf*

New Zealand Police website. (*2023*) Time and Place Victimisation data. *https://www.police.govt.nz/about-us/publications-statistics/data-and-statistics/policedatanz/victimisation-time-and-place*

Statistics New Zealand website. (*2021*). Auckland population may hit 2 million in early 2030s. https://www.stats.govt. nz/news/auckland-population-may-hit-2-million-in-early-2030s

Waka Kotahi *(2022).* Contract Number 3712 Te Ara Tupua Alliance Appendix A09 Environmental and Landscape.

WSP (*2022*) Safer Cities by Design: A Discussion Paper. Report Prepared by Anne Cunningham for the Helen Clark Foundation.

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Appendix 1: CPTED Glossary

Term	
Legibility	Clear and logical layout which is easy to read
Mechanical surveillance	CCTV camera, security gating and access control
Supervision	This term has been used as an alternative to the widely used CPTED term ‘surveillance’, otherwise known as ‘Eye’s on the Street’.

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Appendix 2: CPTED – Visual Summary of Receiving Environment

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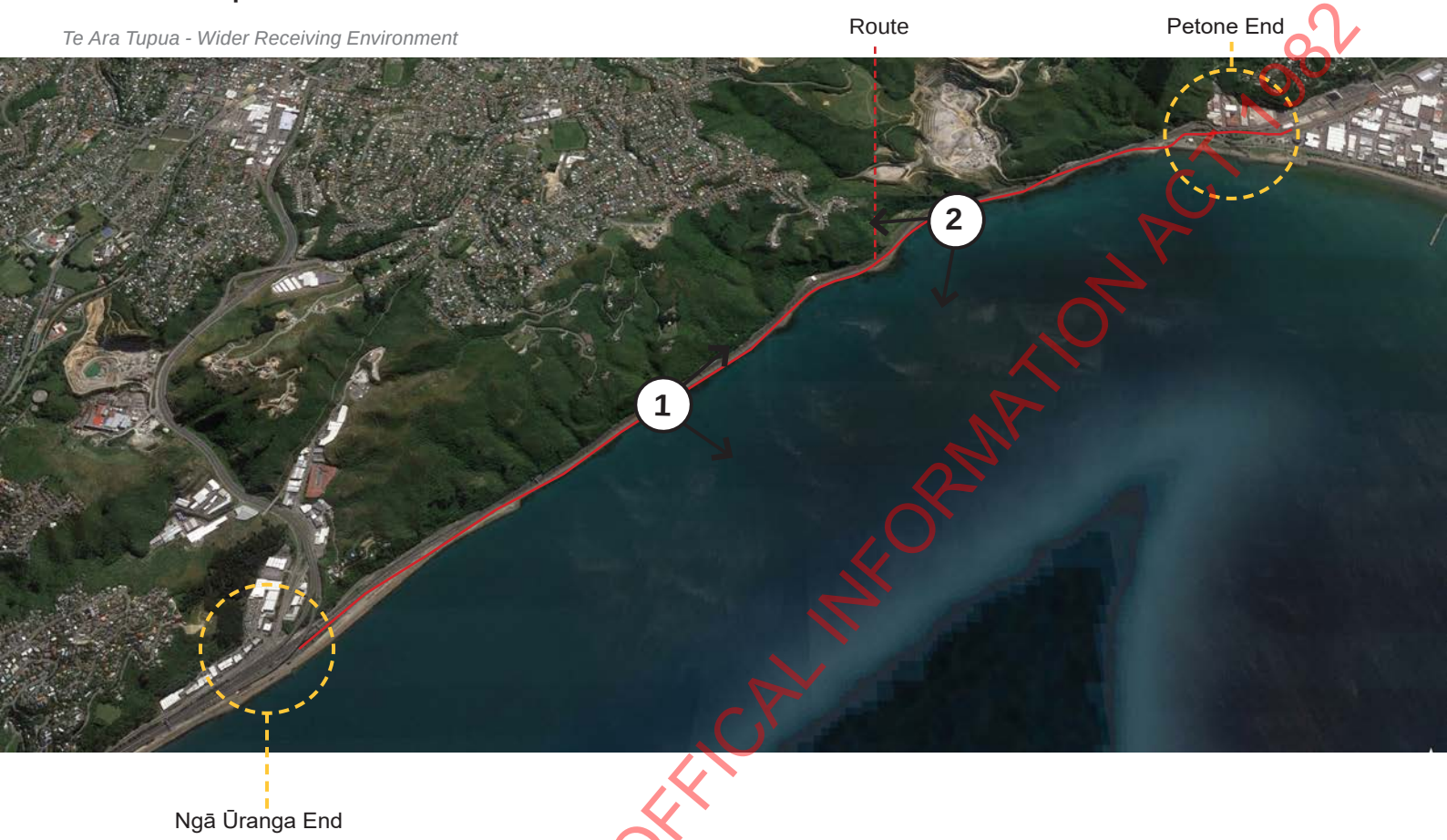
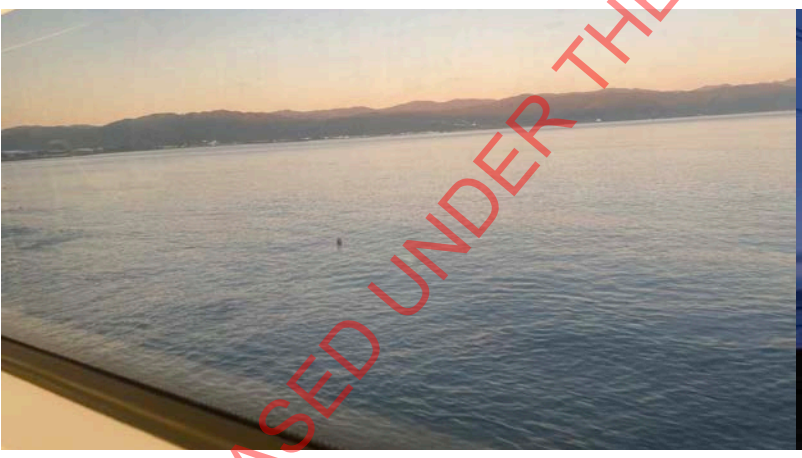
CPTED - Visual summary of Receiving Environment

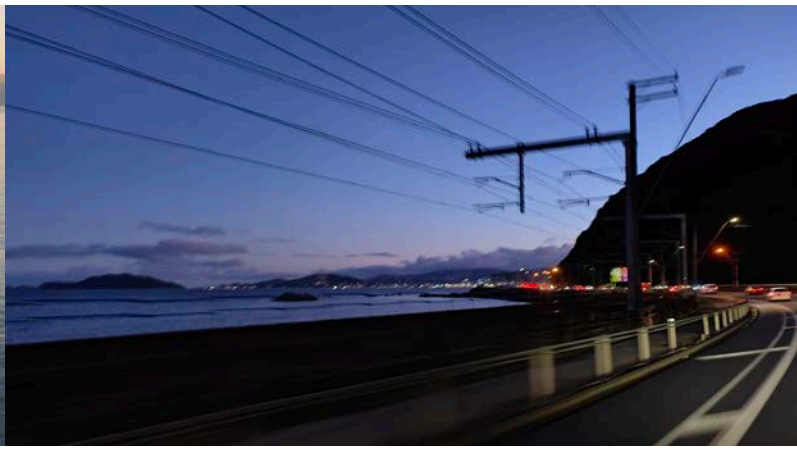
Te Ara Tupua

Te Ara Tupua - Wider Receiving Environment





1. View from the train to where seawall and shared path will be located



2.View from SH 2 shows road lighting along SH2 does not reach future path location to the southeast of the rail line.

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Ngā Ūranga End

Existing Path
Future Path
Underpass

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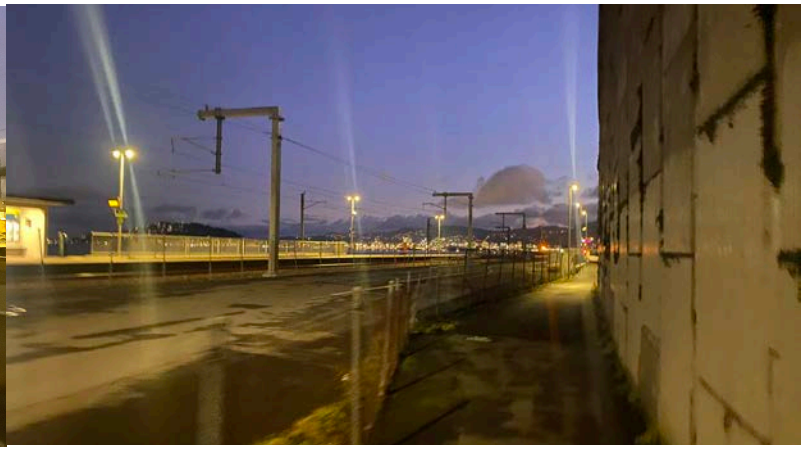
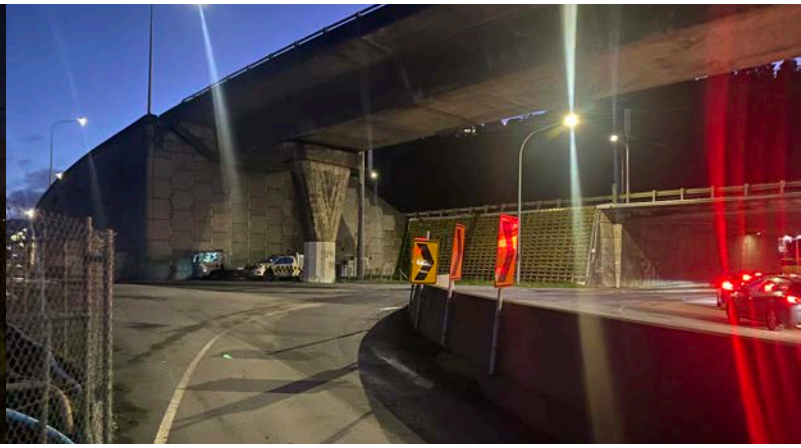
1.Pedestrian and cycle access from Ngauranga train station (night)



2.Pedestrian and cycle access to Ngauranga train station

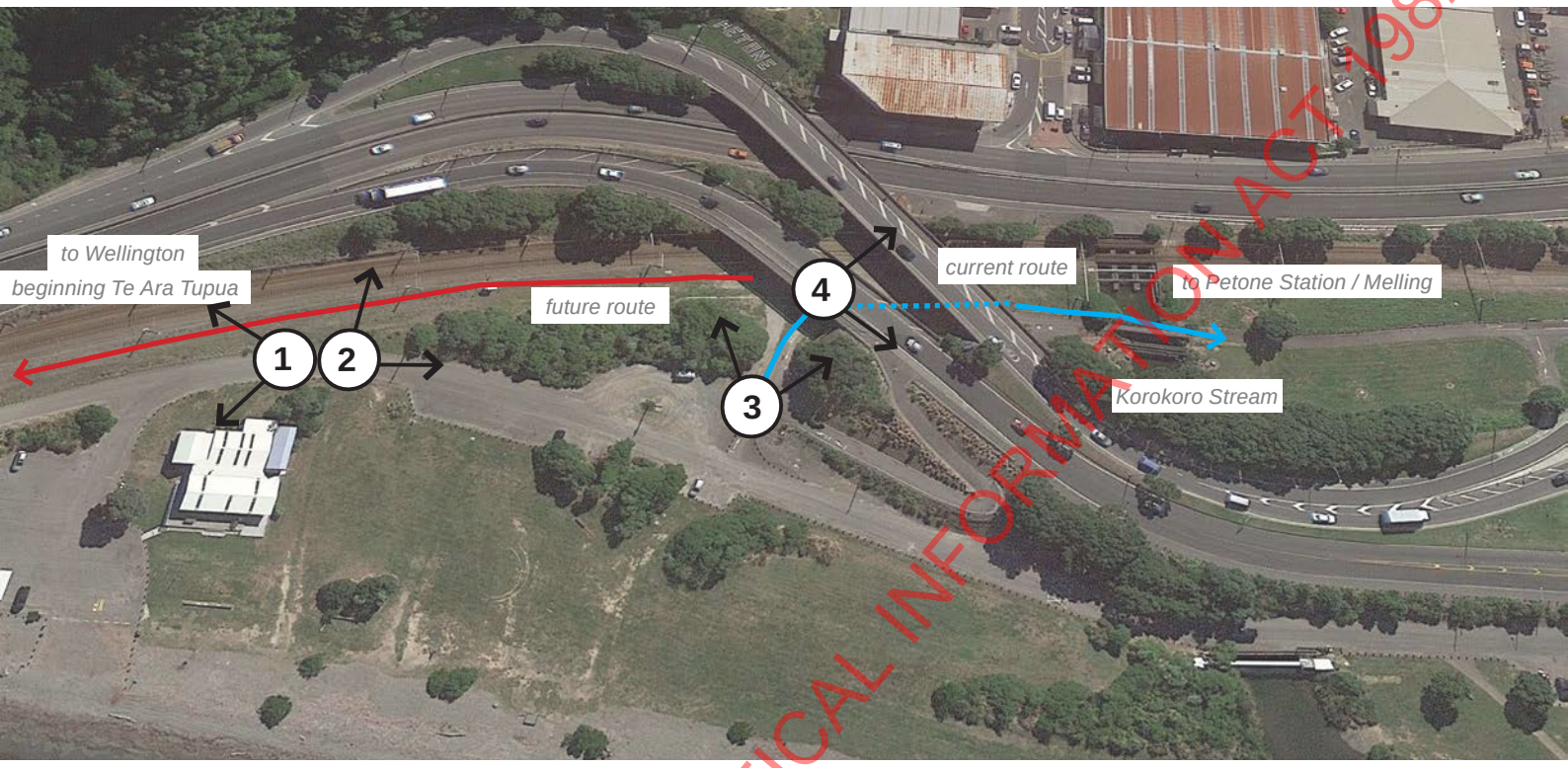
3.Southern access point to Te Ara Tupua



4.Southern exit point from Te Ara Tupua

Pito-one End West

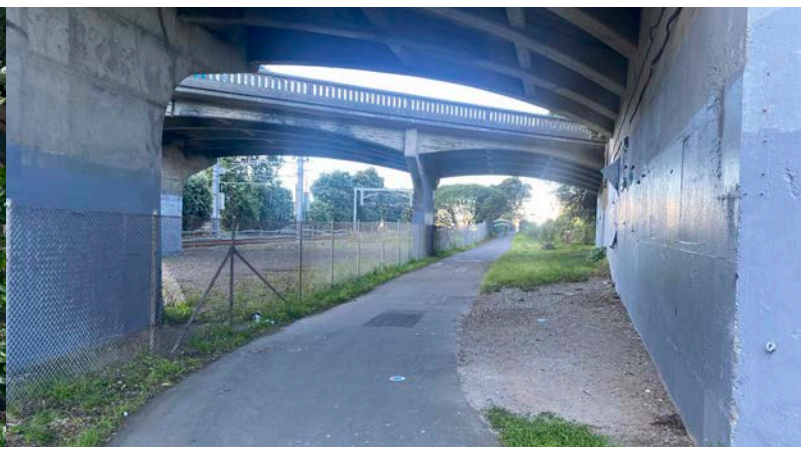
Existing Path
Future Path
Underpass



1.Future route (southbound) to Wellington

2.Future route (northbound) that will link to existing underpass

3.Sightline through underpass is obscured by bend in path



4. Underpass on the existing and future route

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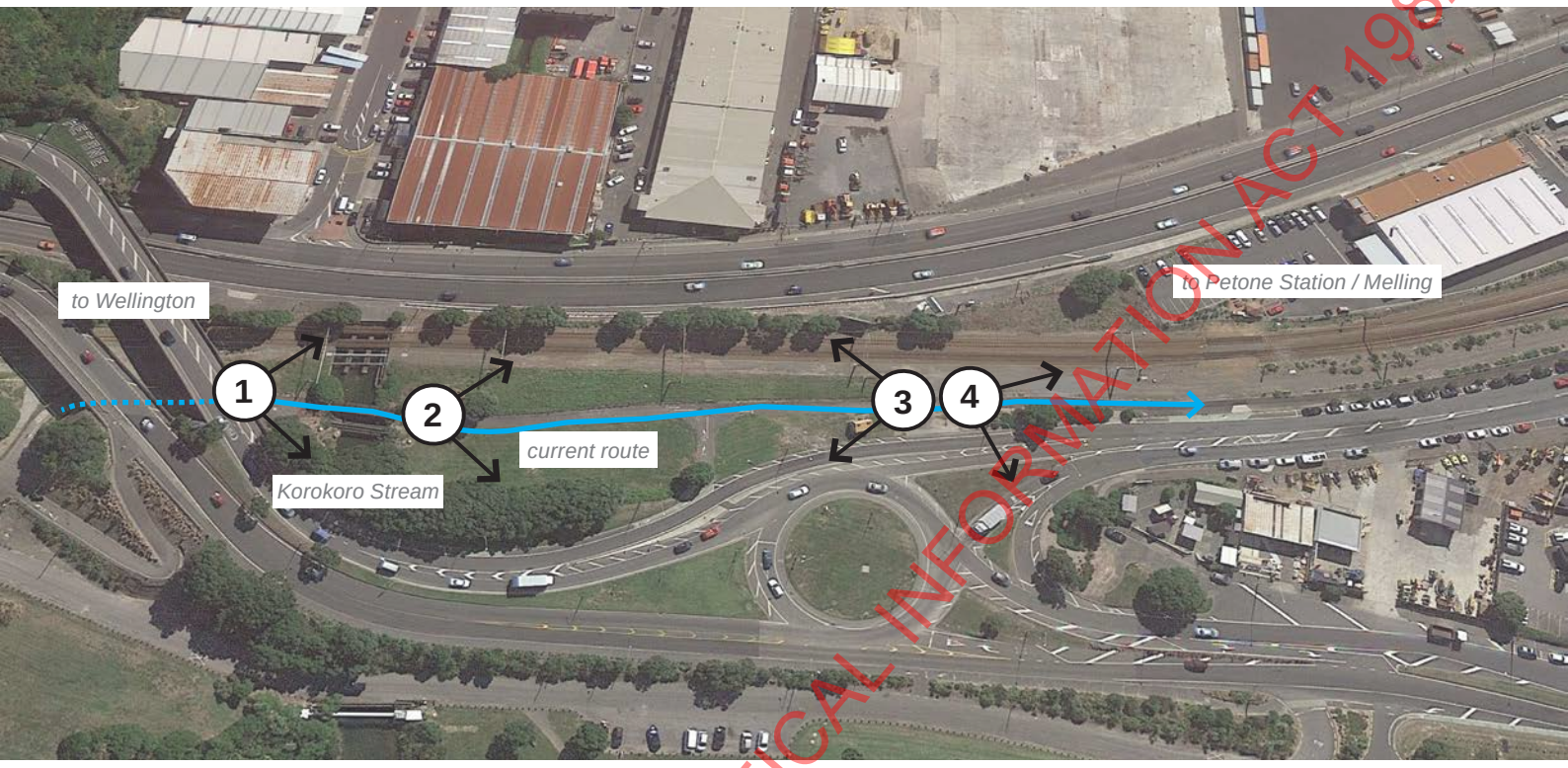
Pito-one End East

Existing Path
Future Path
Underpass



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1.Approaching the Korokoro Stream Bridge

2.Leaving the underpass and bridge (northbound at dusk)

3.Approaching the bridge and underpass (southbound at dusk - note the difference to photo 2)

4.Overgrown path northbound to Pito-one to Melling

Appendix 3: CPTED Site Context

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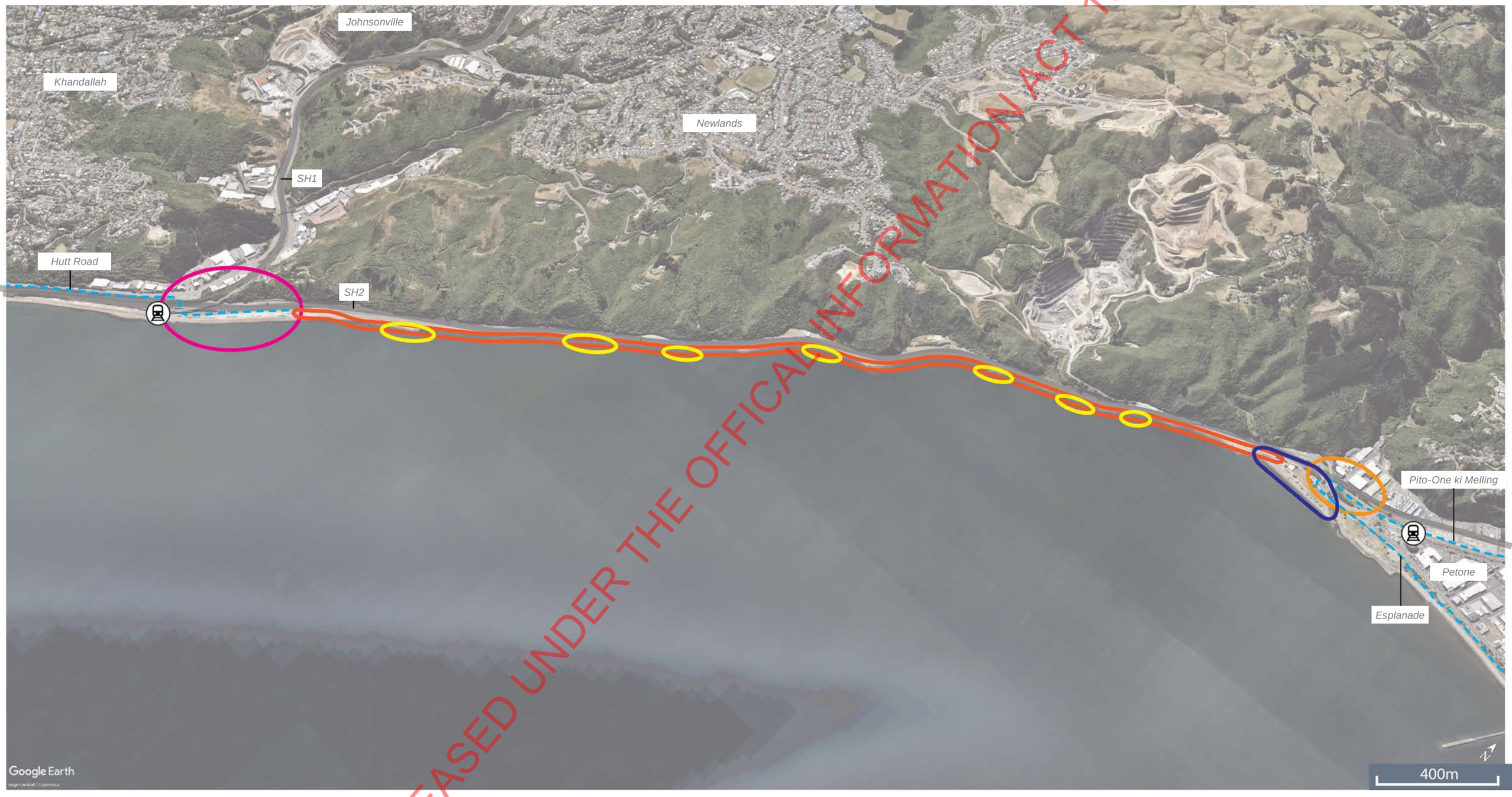
CPTED - Site Context

Te Ara Tupua



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Key

CPTED Context "Zones"

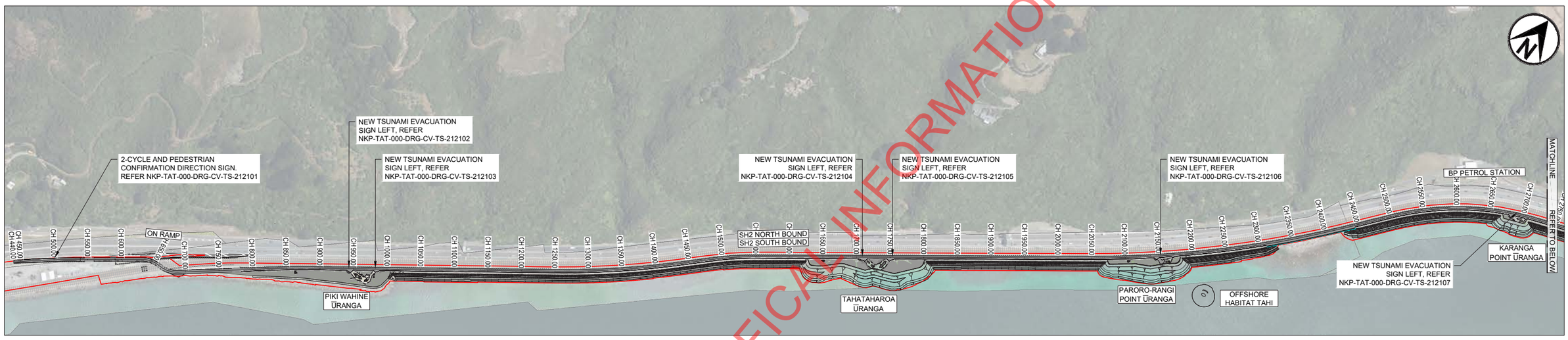
- The southern gateway environment (Ngā Ūranga)
- The length of the new path
- The ūranga (approx)
- Honiana Te Puni Reserve East
- The northern gateway environment (Pito-One)

Site Context

- Train station
- Existing cycle / pedestrian network
- State Highway

CPTED - Site Context

Te Ara Tupua (detailed plans)



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Appendix 4: Relevant CPTED Policy

National Guidelines

Crime Prevention through Environmental Design (CPTED) has emerged as one of the most commonly used and currently effective approaches to reducing opportunities for crime. Research shows that crime and the fear of crime can be significantly reduced by implementing appropriate environmental design strategies in the community. The way we design our urban spaces can significantly influence the opportunities for crime and level of fear which users may feel.

The National Guidelines for CPTED (2005), prepared by the Ministry of Justice, explains that CPTED*: "is a crime prevention philosophy based on proper design and effective use of the build environment leading to a reduction in the incidence and fear of crime, as well as an improvement in the quality of life."* As such, CPTED is an important tool in managing the physical environment and is directly applicable to the security, Site constraints and challenges that affect the Site.

This review has been prepared in the context of the four key principles considered within CPTED as outlined by the National Guidelines:

1. **Surveillance** - people are present and can see what is going on.
2. **Access Management** - methods are used to attract people and vehicles to some places and restrict them from others.
3. **Territorial Reinforcement** - clear boundaries encourage community 'ownership' of the space.
4. **Quality Environments** - good quality well maintained spaces that attract people and support surveillance.

The National Guidelines also define seven qualities that characterise well designed, safer places. These qualities broaden the view of CPTED to include additional factors which result in both good CPTED outcomes and a 'high-quality urban design'. These additional CPTED qualities include:

1. **Access: Safe Movement and Connections** - places with well-defined routes, spaces and entrances that provide for convenient and safe movement without compromising security.
2. **Surveillance and Sightlines: See and be Seen** - places where all publicly accessible spaces are overlooked, and clear sightlines and good lighting provide maximum visibility.
3. **Layout: Clear and Logical Orientation** - places laid out to discourage crime, enhance perception of safety and help orientation and wayfinding.
4. **Activity Mix: Eyes on the Street** - places where the level of human activity is appropriate to the location and creates a reduced risk of crime and a sense of safety at all times by promoting a compatible mix of uses and increased use of public spaces.

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5. **Sense of Ownership: Showing a Space is Cared For** - Places that promote a sense of ownership, respect, territorial responsibility and community.
6. **Quality Environments: Well Designed, Managed and Maintained Environments** - places that provide a quality environment and are designed with management and maintenance in mind to discourage crime and promote community safety in the present and future.
7. **Physical Protection: Using Active Security Measures** - places that include necessary, well designed security features and elements.

Local Guidelines

Waka Kotahi's contract for Te Ara Tupua Alliance, in the Environmental and Landscape Appendix A09 requires in Section 5.3 – Public Safety and Security that under 5.3.1 "*Crime Prevention through Environmental Design (CPTED), road safety, and human health (e.g. noise exposure and accessibility included for the mobility impaired) shall be considered in the selection and development of design solutions. The project shall contribute to a transport network that is safe with reduced opportunities for crime and the fear of crime*" and in 5.3.2 "*Fencing shall be integrated into the landscape design and highway design to ensure public safety and security*".

New Zealand Urban Design Protocol

The Protocol provides a platform to make NZ towns and cities more successful through quality urban design and introduces seven essential design qualities that together create quality urban design. It outlines that quality urban design amongst other things:

> *"adds social, environmental and cultural benefits by creating well connected, inclusive and accessible places, and by delivering the mix of houses, uses and facilities that we need. It can enhance safety, reduce crime and fear of crime and enhance energy efficiency. Quality urban design can provide us with more and better opportunities for physical activity, resulting in improved physical and social wellbeing." (emphasis added)*

Summary of the Seven C's (Definitions from Urban Design Protocol)	**How this relates to CPTED**
Context Quality urban design sees buildings, places and spaces not as isolated elements but as part of the whole town or city. Urban design has a strong spatial dimension and optimises relationships between buildings, places, spaces, activities and networks. It also recognises that towns and cities are part of a constantly evolving relationship between people, land, culture and the wider environment.	It is important to understand the CPTED context (or receiving environment) including the kind of issues which need to be considered and the level of risk associated with a project.

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Character Quality urban design reflects and enhances the distinctive character and culture of our urban environment, and recognises that character is dynamic and evolving, not static. It ensures new buildings and spaces are unique, are appropriate to their location and compliment their historic identity, adding value to our towns and cities by increasing tourism, investment and community pride.	Character provides interest and contributes towards creating a high-quality environment. Areas with higher-quality environments tend to be better activated, have more supervision and become safer places. This links to the National Guidelines for CPTED 'Quality Environments' quality. The notion of fostering community pride (stewardship) also links closely with CPTED principles. This links to the National Guidelines for CPTED 'Sense of Ownership' quality.
Choice Quality urban design fosters diversity and offers people choice in the urban form of our towns and cities, and choice in densities, building types, transport options, and activities. Flexible and adaptable design provides for unforeseen uses, and creates resilient and robust towns and cities	Providing for choice is a key part of CPTED specifically in allowing people to 'escape' if presented with a situation they are not comfortable with. Flexible and adaptive designs allow for places to be managed in different ways depending on what's going on. For example, how does a place respond to large crowds? This links to the National Guidelines for CPTED 'Physical Protection' quality.
Connections Good connections enhance choice, support social cohesion, make places lively and safe, and facilitate contact among people. Quality urban design recognises how all networks - streets, railways, walking and cycling routes, services, infrastructure, and communication networks - connect and support healthy neighbourhoods, towns and cities. Places with good connections between activities and with careful placement of facilities benefit from reduced travel times and lower environmental impacts. Where physical layouts and activity patterns are easily understood, residents and visitors can navigate around the city easily	Safe movement and connections allow all people to instinctively navigate through a place and get to where they need to be without stress. This makes people feel comfortable in a place. If environments are difficult to navigate and people get lost, this can cause anxiety and results in less favourable behaviour and decision making. This links to the National Guidelines for CPTED 'Access' and 'Layout' quality.
Creativity Quality urban design encourages creative and innovative approaches. Creativity adds richness and diversity and turns a functional place into a memorable place. Creativity facilitates new ways of thinking, and willingness to think through problems afresh,	This fosters a diversity in people and attracts people to a place, in turn providing activation and surveillance. Creativity also could result in a high-quality environment, a key CPTED quality.

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to experiment and rewrite rules, to harness new technology, and to visualise new futures. Creative urban design supports a dynamic urban cultural life and fosters strong urban identities.	This links to the National Guidelines for CPTED 'Quality Environments' quality.
Custodianship Quality urban design reduces the environmental impacts of our towns and cities through environmentally sustainable and responsive design solutions. Custodianship recognises the lifetime costs of buildings and infrastructure and aims to hand on places to the next generation in as good or better condition. Stewardship of our towns includes the concept of kaitiakitanga. It creates enjoyable, safe public spaces, a quality environment that is cared for, and a sense of ownership and responsibility in all residents and visitors.	Fostering this indicates that a space is cared for and that the community engages with this place (activates a place) to promote a feeling of safety and wellbeing. This links to the National Guidelines for CPTED 'Sense of Ownership' quality.
Collaboration Towns and cities are designed incrementally as we make decisions on individual projects. Quality urban design requires good communication and co-ordinated actions from all decision-makers: central government, local government, professionals, transport operators, developers and users. To improve our urban design capability we need integrated training, adequately funded research and shared examples of best practice.	Collaboration which involves the community can foster a sense of 'ownership' and pride in a place. This links to the National Guidelines for CPTED 'Sense of Ownership' quality.

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Boffa Miskell is a leading New Zealand professional services consultancy with offices in Whangarei, Auckland, Hamilton, Tauranga, Wellington, Nelson, Christchurch, Dunedin, and Queenstown. We work with a wide range of local and international private and public sector clients in the areas of planning, urban design, landscape architecture, landscape planning, ecology, biosecurity, cultural heritage, graphics and mapping. Over the past four decades we have built a reputation for professionalism, innovation and excellence. During this time we have been associated with a significant number of projects that have shaped New Zealand's environment.

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