

Proposed Concept Sheet 1



NOTES

- ① New 3.5 meter wide concrete shared path. Lightly exposed concrete finish with black oxide to reduce glare, 13mm chip aggregate and shell or paver detail at intersections and crossings.

② New kerb and channel to provide pedestrians with vertical separation from the carriageway for safety where space is limited.
- ③ Formalised vehicle entrances retaining a two-way movement, ensuring continued ease of access for vehicles but reduced crossing distance for pedestrian safety and extended landscape strip for additional amenity.

④ Enhancement of the existing grass swale and streetscape. New Specimen tree planting, low shrubs and grass areas.
- ⑤ Formalised and coordinated signs located at entrances. Vegetation will ensure clear sight lines.

⑥ New pedestrian pole lighting at approximately 20 meter intervals to provide visibility, security and a feeling of safety for users.
- ⑦ Existing pedestrian refuge. Potential to increase pedestrian safety in the future by extending kerb to shorten crossing distance and slow vehicle traffic movements.

Proposed Concept Sheet 2



- NOTES**

 - ① New 3.5 meter wide concrete shared path. Lightly exposed concrete finish with black oxide to reduce glare, 13mm chip aggregate and shell or paver detail at intersections and crossings.
 - ② New kerb and channel to provide pedestrians with vertical separation from the carriageway for safety where space is limited.
 - ③ Formalised vehicle entrances retaining a two-way movement, ensuring continued ease of access for heavy vehicles but reduced crossing distance for pedestrian safety.
 - ④ Enhancement of the existing landscape strip to provide amenity to streetscape and industrial site road frontage. New Specimen tree planting, low shrubs and grass areas.
 - ⑤ Formalised and coordinated signs located at entrances. Vegetation will ensure clear sight lines.
 - ⑥ New pedestrian pole lighting at approximately 20 meter intervals to provide visibility, security and a feeling of safety for users.
 - ⑦ A flush concrete edge beam and planted swale provides both horizontal separation for pedestrians and cyclists from the carriageway, softens the shared path environment and provides a green / soft drainage solution.

Proposed Concept Sheet 3



NOTES

- ① New 3.5 meter wide concrete shared path. Lightly exposed concrete finish with black oxide to reduce glare, 13mm chip aggregate and shell or paver detail at intersections and crossings.
- ② New kerb and channel to provide pedestrians with vertical separation from the carriageway for safety where space is limited.
- ③ Formalised vehicle entrances retaining a two-way movement, ensuring continued ease of access for heavy vehicles but reduced crossing distance for pedestrian safety.
- ④ Five Norfolk Pines and two Eucalyptus may require removal in this section of the shared path to retain a 3.5 meter width.
- ⑤ Enhancement of the existing landscape strip to provide amenity to streetscape. New Specimen trees planted to mitigate tree removals.
- ⑥ New pedestrian pole lighting at approximately 20 meter intervals to provide visibility, security and a feeling of safety for users.
- ⑦ New pedestrian crossing to tie in with the proposed Mangawhai Community Park shared path, providing access to the reserve and associated activities. Includes a change in surface treatment, tactile indicators and planting. Exact location to be confirmed.
- ⑧ Extended kerb to shorten crossing distance and a raised pedestrian crossing ensures pedestrian safety and slow vehicle movements where the shared path intersects with side roads. Variation in surface treatment, signage and the path alignment will help to slow bikes and warn pedestrians of the crossing.
- ⑨ Landscaped nodes at side road intersections include paving details, garden beds, signage, lighting and furniture. Sight distance will be maintained for safety.
- ⑩ A flush concrete edge beam and planted swale provides horizontal separation for pedestrians and cyclists from the carriageway, softens the shared path environment and provides a green / soft drainage solution. The existing pedestrian refuge to be integrated into the swale design.

Proposed Concept Sheet 4



NOTES

- ① New 3.5 meter wide concrete shared path. Lightly exposed concrete finish with black oxide to reduce glare, 13mm chip aggregate and shell or paver detail at intersections and crossings.
- ② New kerb and channel to provide pedestrians with vertical separation from the carriageway for safety where space is limited.
- ③ Three Norfolk Pines may require removal in this section of the shared path to retain a 3.5 meter width. Enhancement of the existing landscape strip to provide amenity to streetscape. Weed removal and management, new native specimen tree mitigation planting and low shrubs.
- ④ Extended kerb to shorten crossing distance and a raised pedestrian crossing ensures pedestrian safety and slow vehicle movements where the shared path intersects with side roads. Variation in surface treatment, signage and the path alignment will help to slow bikes and warn pedestrians of the crossing.
- ⑤ Landscaped nodes at side road intersections include paving details, garden beds, signage, lighting and furniture.
- ⑥ New pedestrian pole lighting at approximately 20 meter intervals to provide visibility, security and a feeling of safety for users.
- ⑦ A new entrance feature wall and low planting to replace the existing one at the Seabreeze Road intersection, if required.

Proposed Concept Sheet 5



NOTES

- ① New 3.5 meter wide concrete shared path. Lightly exposed concrete finish with black oxide to reduce glare, 13mm chip aggregate and shell or paver detail at intersections and crossings.

② New kerb and channel to provide pedestrians with vertical separation from the carriageway for safety where space is limited.
- ③ Enhancement of the existing landscape strip to provide amenity to streetscape. Weed removal and management, new native specimen tree planting, where possible, and low shrubs.

④ New pedestrian crossing to tie in with the proposed Mangawhai Community Park shared path, providing access to the Museum and Historical Village. Includes a change in surface treatment, tactile indicators and planted pedestrian refuge. Exact location to be confirmed.
- ⑤ New pedestrian pole lighting at approximately 20 meter intervals to provide visibility, security and a feeling of safety for users.

Proposed Concept Sheet 6



- NOTES**

 - ① New 3.5 meter wide concrete shared path. Lightly exposed concrete finish with black oxide to reduce glare, 13mm chip aggregate and shell or paver detail at intersections and crossings.
 - ② New kerb and channel to provide pedestrians with vertical separation from the carriageway for safety where space is limited.
- ③ A flush concrete edge beam and planted swale provides horizontal separation for pedestrians and cyclists from the carriageway, softens the shared path environment and provides a green / soft drainage solution.
 - ④ Extended kerb to shorten crossing distance and a raised pedestrian crossing ensuring pedestrian safety and slow vehicle movements where the shared path intersects with side roads. Variation in surface treatment, signage and the alignment will help to slow bikes and warn pedestrians of the crossing.
- ⑤ Landscaped nodes at side road intersections include paving details, garden beds, signage, lighting and furniture.
 - ⑥ New pedestrian pole lighting at approximately 20 meter intervals to provide visibility, security and a feeling of safety for users.
 - ⑦ Four to seven Norfolk Pines may require removal in this section of the shared path to retain a 3.5 meter width, swale drain and planting. Mitigation specimen tree planting is proposed.

Proposed Concept Sheet 7



NOTES

- ① New 3.5 meter wide concrete shared path. Lightly exposed concrete finish with black oxide to reduce glare, 13mm chip aggregate and shell or paver detail at intersections and crossings.

② New kerb and channel to provide pedestrians with vertical separation from the carriageway for safety where space is limited.
- ③ Enhancement of the existing landscape strip to provide amenity to streetscape. Weed removal and management, new native specimen tree planting, where possible, and low shrubs.

④ A new 3.5 meter wide boardwalk connects to the Tara Creek crossing. This provides pedestrian and cyclist separation from the carriageway and an up close experience with the water and estuary environment. Handrails, lighting and clear sight lines from the carriageway to the boardwalk will be maintained for safety.
- ⑤ The Tara Creek crossing will span approximately 50 meters. This connection will be established as part of a secondary phase of work. In the interim the existing path connection will be retained.

⑥ New pedestrian pole lighting at approximately 20 meter intervals to provide visibility, security and a feeling of safety for users.
- ⑦ Minor vegetation removal required to provide access to the boardwalk from Molesworth Drive. Consider a boardwalk entrance feature at each end.



NOTES

① A new 3.5 meter wide boardwalk connects to the Tara Creek crossing. This provides pedestrian and cyclist separation from the carriageway and an up close experience with the water and estuary environment. Handrails, lighting and clear sight lines from the carriageway to the boardwalk will be maintained for safety.

② Enhancement of the existing landscape strip to provide amenity to streetscape. Weed removal and management, new native specimen trees, where possible, and low shrubs.

③ New pedestrian pole lighting at approximately 20 meter intervals to provide visibility, security and a feeling of safety for users.



- NOTES**

① A new 3.5 meter wide boardwalk connects to the Tara Creek crossing. This provides pedestrian and cyclist separation from the carriageway and an up close experience with the water and estuary environment. Handrails, lighting and clear sight lines from the carriageway to the boardwalk will be maintained for safety.
- ② New 3.5 meter wide concrete shared path. Lightly exposed concrete finish with black oxide to reduce glare, 13mm chip aggregate and shell or paver detail at intersections and crossings.

③ Minor vegetation removal may be require in this section of the shared path to gain access for the shared path. Enhancement of the existing landscape strip to provide amenity to streetscape and path. Weed removal and management, new native specimen tree mitigation planting and low shrubs.
- ④ New pedestrian pole lighting at approximately 20 meter intervals to provide comfort, security and a feeling of safety for users.

⑤ Southern extent of the works includes a section of 3.5 meter wide concrete path which will connect into the Mangawhai Central section of shared path.

Intersection Design

NOTES

- ① An extended kerb line, to narrow the crossing distance, and a raised pedestrian crossing will slow traffic and provide a safe and smooth transition for the shared path across side road intersections. This will provide minimal level change for cyclists and people with limited mobility.
- ② A variation in paving surface, either the exposed aggregate and shell concrete surface or pavers, indicates a side road intersection or road crossing point. Tactile markers will be included for the visually impaired.
- ③ Markings on the pavement surface and pole signs will provide directional information, separating users moving in each direction, at side road intersections to ensure user safety.
- ④ Garden beds provide separation between the shared path and the carriageway at intersections. Low ground covers, shrubs and crown lifted trees retain clear sight lines between the shared path and carriageway.
- ⑤ Pedestrian pole lighting will be placed at side road intersections to ensure early morning and evening commuters are visible.
- ⑥ New native specimen tree planting will be included where Norfolk Pine removal is required and where space allows for additional amenity planting.
- ⑦ Connections between the new shared path and existing pedestrian paths will be established.



Materials Palette

Surfaces



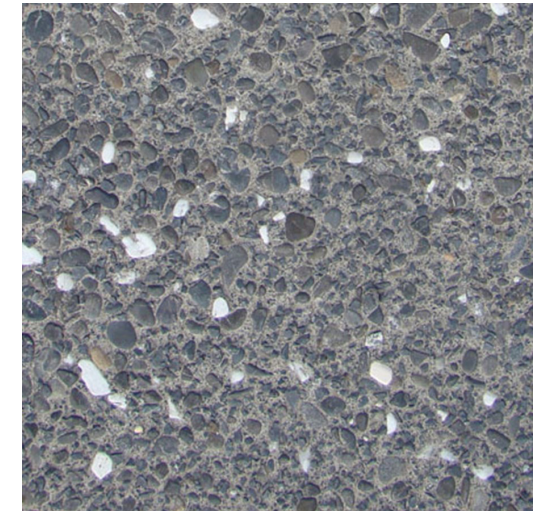
Lightly exposed 13mm aggregate concrete finish with black oxide will be broken up with inclusion of shell or paving details. Including tactile crossing indicators at intersections.



Where the shared path meets the Molesworth Drive causeway and bridge, a separate timber boardwalk provides a more recreational experience separating users from the vehicle carriageway and inviting them in to the estuarine environment.

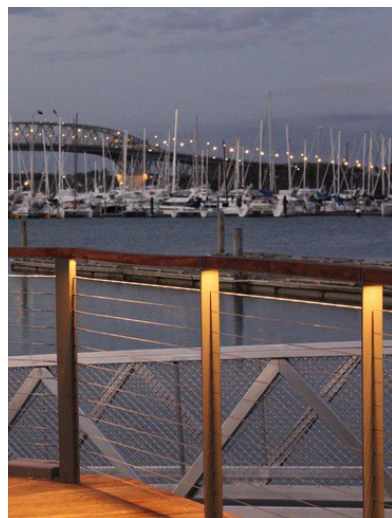


Concrete finishes can also include directional and information signage at intersections to guide pedestrian and cyclist movements.



Exposed aggregate concrete with 13mm chip, 6% black oxide and 10% shell around intersections and crossing points provide an entrance feature. This, along with signage, will indicate a change in behavior for users separating them directionally for increased safety at intersections.

Elements



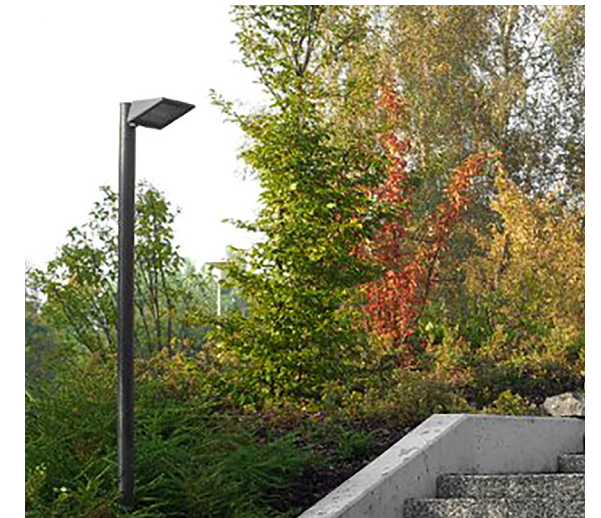
Bike stands, bollards and lighting features will be combined where ever possible to reduce clutter within the shared path corridor.



Safety rails and barriers will be included where required to ensure user safety as well as directional and information signage on the ground surface.



Garden beds including native planting will be located along the shared path at intersections to provide amenity, soften the appearance of the path and provide a safe separation from the carriageway for pedestrians and cyclists.



Simple, recessive pole mounted luminaries will provide lighting for evening and morning commuters.

Indicative Tree and Plant Species

Trees



Metrosideros excelsa
Pohutukawa
Feature tree for large spaces,
used for staged enhancement /
replacement of Norfolk Pines



Metrosideros mistral
Natural Pohutukawa / Rata
hybrid. Feature tree for smaller
spaces



Rhopalostylis sapida
Nikau Palm
For swale and amenity
planting



Cordyline australis
Cabbage Tree
For swale and amenity planting



Sophora chathamica
Kowhai tree coastal
Feature tree planting for mixed
amenity planting



Kowhai flowers provide seasonal
interest and attract bird life

Shrubs and Ground cover



Pimelea villosa
Sand Daphne
Low ground cover



Coprosma mangatangi
Low ground cover



Libertia edgarine
Hardy coastal shrub
Flowers for seasonal
variation



Carex virgata
Native sedge



Apodasmia similis
Oioi
For swale and amenity
planting



Phormium cookianum 'Green
Dwarf'
Small mountain flax
For amenity planting



Euphorbia glauca
Medium shrub
For amenity planting