I hereby give notice that an ordinary meeting of the Pukekiwiriki Paa Joint Management Committee will be held on:

Date: Tuesday, 10 April 2018
Time: 11.00am
Meeting Room: Papakura Local Board Chambers
Venue: Level 1
Papakura Service Centre
35 Coles Crescent
Papakura

Pukekiwiriki Paa Joint Management Committee
OPEN AGENDA

MEMBERSHIP
Chairperson       Karen Wilson            Te Akitai Waiohua
Deputy Chairperson Brent Catchpole      Papakura Local Board
Members           Bill McEntee            Papakura Local Board
                 Felicity Auva’a          Papakura Local Board
                 Gavin Anderson        Ngati Whanaunga
                 Hon. George Hawkins, QSO Papakura Local Board
                 Jonathan Billington  Ngai Tai ki Tamaki Trust
                 Karl Flavell           Ngati Te Ata Waiohua
                 Katrina Winn           Papakura Local Board
                 Mahu Rawiri            Ngati Paoa Trust
                 Michael Turner         Papakura Local Board
                 Ted Ngataki            Ngati Tamaoho
Alternate Members Edith Tuhimata         Ngati Te Ata Waiohua

(Quorum 3 members Papakura Local Board Members and 3 Iwi Representatives)

Paula Brooke
Local Board Democracy Advisor

5 April 2018

Contact Telephone: (09) 295 1331
Email: Paula.Brooke@aucklandcouncil.govt.nz
Website: www.aucklandcouncil.govt.nz

Note: The reports contained within this agenda are for consideration and should not be construed as Council policy unless and until adopted. Should Members require further information relating to any reports, please contact the relevant manager, Chairperson or Deputy Chairperson.
Pukekiwiriki Paa Joint Management Committee

Terms of Reference

Members:

Papakura Local Board: Brent Catchpole (Chairperson)
Felicity Auva’a (Deputy Chairperson)
Bill McEntee
Hon. George Hawkins
Michael Turner
Katrina Winn

Iwi Representatives:
Ngāti Tamaoho Ted Ngataki
Ngāti Te Ata Karl Flavell
Te Akitai Waiohua Karen Wilson
Ngāti Whanaunga Gavin Anderson
Ngāti Paoa Mahu Rawiri
Ngāi Tai ki Tāmaki Jonathan Billington

Alternate members:
Ngāti Tamaoho Edith Tuhimata
Ngāti Te Ata
Te Akitai Waiohua
Ngāti Whanaunga
Ngāti Paoa
Ngāi Tai ki Tāmaki

Where an iwi representative cannot attend a meeting, the alternate member for that iwi representative may attend the meeting on behalf of that iwi representative.

Background:

The Pukekiwiriki Paa Reserve Joint Management Plan (“the Plan”) was prepared by the former Papakura District Council and Te Roopu Kaitiaki o Papakura and contains long-term objectives and detailed implementation actions for the effective management of Pukekiwiriki Paa.

The Plan was adopted by Papakura District Council on 11 May 2010 following a public process which began in June 2008. The Plan was approved pursuant to the provisions of section 41(1) of the Reserves Act 1977 and to a delegation from the Minister of Conservation.

One of the Plan’s objectives is to ensure that mana whenua and council work together in partnership to manage the reserve. To give effect to this objective and implement the Plan, Papakura Local Board has established the Pukekiwiriki Paa Joint Management Committee, comprising representatives of the local board and mana whenua. The local board has delegated its Reserves Act powers and responsibilities for the Pukekiwiriki Paa reserve management to the joint management committee.
**Purpose:**

To implement the visions, principles, goals and objectives outlined in the Plan whilst recognising the integrity and policies of each party, and working together in the spirit of partnership. To exercise delegated powers under the Reserves Act 1977.

**Goal:**

To co-manage the Pukekiwiriki Paa Reserve according to the vision, principles and objectives of the Plan, in accordance with the Reserves Act 1977.

**Chairperson and deputy chairperson:**

The committee will appoint the chairperson and the deputy chairperson at the first meeting. The term of the chairperson and deputy chairperson will be up to one year, or until a new chairperson and the deputy chairperson is appointed (whichever is longer).

**Decision making:**

The committee will aspire to make all decisions by consensus.

**Quorum:**

Three iwi representatives (or alternates) and three local board representatives.

**Meeting Frequency:**

Meetings of the committee will be held twice a year unless otherwise resolved by the committee. The committee will agree upon a meeting schedule at its first meeting.

**Funding:**

Auckland Council will be responsible for funding the implementation of the Reserve Management Plan and resourcing the committee to give effect to its decisions. Papakura Local Board will make annual provision for ongoing implementation, maintenance and management of the reserve within the capital and operating budgets allocated to local parks services.
Responsibilities:

The Pukekiwiriki Paa Joint Management Committee has responsibility for the administration and management of the Pukekiwiriki Paa Historic Reserve, as outlined in the Pukekiwiriki Paa Reserve Management Plan/Ta Mahere Whakahaere o Pukekiwiriki.

The Pukekiwiriki Paa Joint Management Committee is responsible for the implementation and monitoring of the Pukekiwiriki Paa Reserve Management Plan at a governance level. The Committee has the decision making authority regarding allocation of the Papakura Local Board budget for implementation of the Reserve Management Plan.

Powers may include, but are not limited to:

- Determining the priorities for implementing the Pukekiwiriki Paa Reserve Management Plan
- Managing the implementation actions of the Plan
- Monitoring the progress of implementation of the Plan
- Monitoring the effects of implementation on the land
- Ensuring that maintenance resources and actions are targeted to meeting the objectives and implementation actions of the management plan
- Ensuring that funding and resourcing for the reserve takes account of the specific and unique needs of the reserve as set out in the management plan
- Viewing and treating the Paa, not just as a reserve, but as a significant taonga that requires particular care and joint expertise to manage
- Setting a prescribed process for works to be carried out on the reserve, in accordance with Reserves Act requirements
- Ensuring that maintenance is carried out in accordance with the Reserve Management Plan and that the Joint Management Committee agrees the levels of service for maintenance on the reserve, subject to any wider council standards
- Ensuring that maintenance regimes for the Paa are developed from the Reserve Management Plan, subject to any wider council standards
- Ensuring that actions identified in the Reserve Management Plan are carried out in the manner set out in the Plan, as resources permit
- Review of the Joint Management Agreement adopted on 28 September 2010

Note: relevant legislation includes but is not limited to:
Local Government Act 2002
Local Government (Auckland Council) Act 2009
Reserves Act 1977
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</table>
1 Karakia / Mihi / Welcome
A member will lead the meeting in a karakia (prayer).

2. Apologies
At the close of the agenda no apologies had been received.

3 Declaration of Interest
Members are reminded of the need to be vigilant to stand aside from decision making when a conflict arises between their role as a member and any private or other external interest they might have.

4 Confirmation of Minutes
That the Pukekiwiriki Paa Joint Management Committee:
a) confirm the ordinary minutes of its meeting, held on Tuesday, 24 October 2017, as a true and correct record.

5 Leave of Absence
At the close of the agenda no requests for leave of absence had been received.

6 Acknowledgements and Tributes
At the close of the agenda no requests for acknowledgements had been received.

7 Petitions
At the close of the agenda no requests to present petitions had been received.

8 Deputations
Standing Order 3.20 provides for deputations. Those applying for deputations are required to give seven working days notice of subject matter and applications are approved by the Chairperson of the Pukekiwiriki Paa Joint Management Committee. This means that details relating to deputations can be included in the published agenda. Total speaking time per deputation is ten minutes or as resolved by the meeting.
At the close of the agenda no requests for deputations had been received.
9 Extraordinary Business

Section 46A(7) of the Local Government Official Information and Meetings Act 1987 (as amended) states:

"An item that is not on the agenda for a meeting may be dealt with at that meeting if -

(a) The local authority by resolution so decides; and

(b) The presiding member explains at the meeting, at a time when it is open to the public,-

(i) The reason why the item is not on the agenda; and

(ii) The reason why the discussion of the item cannot be delayed until a subsequent meeting."

Section 46A(7A) of the Local Government Official Information and Meetings Act 1987 (as amended) states:

"Where an item is not on the agenda for a meeting,-

(a) That item may be discussed at that meeting if-

(i) That item is a minor matter relating to the general business of the local authority; and

(ii) the presiding member explains at the beginning of the meeting, at a time when it is open to the public, that the item will be discussed at the meeting; but

(b) no resolution, decision or recommendation may be made in respect of that item except to refer that item to a subsequent meeting of the local authority for further discussion."

10 Notices of Motion

There were no notices of motion.
Te take mō te pūrongo / Purpose of the report
1. Attaching a copy of the 24 October 2017 Pukekiwiriki Paa Joint Management Committee minutes for members' information.

Secretarial note: The minutes will be approved under item 4 of the agenda.

Ngā tāpirihanga / Attachments

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Ngā kaihaina / Signatories

<table>
<thead>
<tr>
<th>Authors</th>
<th>Lee Manaia - Local Board Democracy Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorisers</td>
<td>Manoj Ragupathy - Relationship Manager Manurewa &amp; Papakura</td>
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</table>
Pukekiwiriki Paa Joint Management Committee

OPEN MINUTES

Minutes of a meeting of the Pukekiwiriki Paa Joint Management Committee held in the Papakura Local Board Chambers, Level 1, Papakura Service Centre, 35 Coles Crescent, Papakura on Tuesday, 24 October 2017 at 11.00am.

PRESENT

Chairperson          Karen Wilson          Te Akitai Waichua
Deputy Chairperson   Brent Catchpole       Papakura Local Board
Members              Bill McEntee            Papakura Local Board
                      Felicity Auva'a           Papakura Local Board
                      Gavin Anderson          Ngāti Whanaunga
                      Jonathan Billington     Ngai Tai ki Tāmaki Trust
                      Edith Tuhimata           Ngāti Te Ata Waiohua
                      Mahu Rawiri              Ngāti Paoa Trust
                      Ted Ngataki              Ngāti Tamaoho
Alternate Members    Martin Te Moni         Ngāti Whanaunga

ABSENT

Members              Michael Turner         Papakura Local Board
                      Hon. George Hawkins, QSO Papakura Local Board
                      Katrina Winn             Papakura Local Board
1 Karakia / Mihi / Welcome
   Ted Ngataki led the meeting in a karakia.

2 Apologies
   Resolution number: PUK/2017/1
   MOVED by Member Catchpole, seconded by Member Ngataki:
   That the Pukekiwiriki Paa Joint Management Committee:
   a) accept the apologies from Mahuika Rawiri, Karl Flavell and Board Members
      Hawkins, Turner and Winn for absence and Bill McEntee for early departure.
      CARRIED

2 Election of Chairperson
   Resolution number: PUK/2017/2
   MOVED by Member Catchpole, seconded by Member Billington
   That the Pukekiwiriki Paa Joint Management Committee:
   a) elects Karen Wilson as the chairperson.
      CARRIED

4 Election of Deputy Chairperson
   Resolution number: PUK/2017/3
   MOVED by Member Ngataki, seconded by Member Auva’a
   That the Pukekiwiriki Paa Joint Management Committee:
   b) elects Brent Catchpole as the Deputy Chairperson.
      CARRIED

5 Declaration of Interest
   There were no declarations of interest.

6 Leave of Absence
   There were no leaves of absence.

7 Acknowledgements and Tributes
   At the close of the agenda no requests for acknowledgements had been received.

8 Petitions
   There were no petitions.
9 Deputations
There were no deputation requests.

10 Extraordinary Business
There was no extraordinary business.

11 Notices of Motion
There were no notices of motion.

12 Pukekiwiriki Paa Joint Management Committee - Parks and Places, Status Report on Tabled Actions - August 2016 Meeting
Resolution number: PUK/2017/4
MOVED by Member McEntee, seconded by Member Billington
That the Pukekiwiriki Paa Joint Management Committee:

a) ensure that future proposed signage for Pukekiwiriki Paa Historical Reserve reflects strongly the no alcohol and smokefree status for this reserve.

b) note that the Parks and Places Specialist will report back on visitor activities on this cultural and historically significant reserve and, if appropriate, recommend a strategy to mitigate any impact from activity.

c) request that any events or school visits must be by way of formal approval and that delegation to approve any events be given to the Chair and Deputy Chair of the Pukekiwiriki Paa Joint Management Committee.

d) request that larger events or school activities be postponed until such time as safer access is available or a health and safety management plan developed with this plan to be produced by December 2017, noting that alternative access may also be arranged.

e) request a health and safety paper including a risk management plan be reported back to the next committee meeting.

CARRIED

13 Pukekiwiriki Paa Joint Management Committee Meeting for 2018
Resolution number: PUK/2017/5
MOVED by Member McEntee, seconded by Member Ngataki

That the Pukekiwiriki Paa Joint Management Committee:

a) agree to schedule meetings on Tuesday, 10 April and 9 October 2018.

CARRIED
14 Consideration of Extraordinary Items

There was no consideration of extraordinary items.

12.15pm The Chairperson thanked Members for their attendance and attention to business and declared the meeting closed.

CONFIRMED AS A TRUE AND CORRECT RECORD AT A MEETING OF THE PUKEKIWIRIKI PAA JOINT MANAGEMENT COMMITTEE HELD ON

DATE: ..............................................................

CHAIRPERSON: ..................................................
Te take mō te pūrongo / Purpose of the report
1. To recommend to the Pukekiwiriki Paa Joint Management Committee the preferred option to improve and make safe pedestrian access into Pukekiwiriki Paa.

Whakarāpopototanga matua / Executive summary
2. The pedestrian access into and through Pukekiwiriki Paa Reserve and onto the summit of the Paa has been in a poor state of disrepair for some time.
3. The Pukekiwiriki Paa Joint Management Committee requested that staff investigate the renewal and upgrade of the current access from Red Hill Rd and also investigate the feasibility of developing other alternative entrances.
4. Frame Group Ltd (FGL) were subsequently engaged to undertake the investigation work and they have provided a report (as attached) on the considered options and estimates of cost on the two most viable options.
5. The Community Facilities Department has assessed the health and safety risk of the current entrance into Pukekiwiriki Paa Historic Reserve and has provided a budget to implement the necessary entrance path renewal and upgrade to improve access to the summit of the Paa.

Ngā tūtohunga / Recommendations
That the Pukekiwiriki Paa Joint Management Committee:

a) approve option one of the attached Pukekiwiriki Paa Feasibility Report from Frame Group Ltd to renew and upgrade the current access into the Pukekiwiriki Paa Historic Reserve off Red Hill Rd.

b) request that the Community Facilities Department proceed with this track renewal and that this be funded from the Community Facilities Department renewal programme. This approval to proceed is conditional upon the following conditions:
   i) Detailed design should avoid archaeological sites and sites of cultural significance where possible. If it is shown, through detailed design, that the objectives cannot be achieved without impacting on these sites then mana whenua representatives on the Pukekiwiriki Paa Joint Management Committee shall be advised and given the opportunity to provide feedback on detail design options.
   ii) Mana whenua, with an interest in the site, be offered the opportunity to undertake cultural monitoring.
   iii) Mana whenua, with an interest in this site, shall be invited to jointly input to the tender documentation and evaluate tenders. The tender document shall include criteria that evaluate and support businesses that have an understanding of the values of the site and the significance to mana whenua.

c) note that this committee is a co-governance committee who have been delegated decision making power, by the Papakura Local Board, to determine priorities for implementation of the Pukekiwiriki Paa Reserve Management Plan, manage the
implementation of actions of the Plan, monitor the progress and effects of implementation on the land. It is made up of representatives of the Papakura Local Board, Ngāi Tai ki Tāmaki, Ngāti Tamaoho, Ngāti Te Ata, Te Akitai Waiohua and Ngāti Whanaunga. Ngāti Paoa Iwi Trust has formally withdrawn their membership from the committee noting that they have a secondary interest in Pukekiwiriki Paa and the Papakura area and fully support other mana whenua and the committee. This decision therefore reflects the collective views of those mana whenua listed above.

Horopaki / Context

6. At the 24 October hui of the Pukekiwiriki Paa Joint Management Committee informal direction was provided in respect to the future development priorities for the site. Staff were asked to report back on options for making the access to the Paa safe including looking at alternative access routes. Committee members also noted the desire to ensure the nature of any track development was appropriate to the setting and did not set an expectation of an easy grade/universally accessible route.

7. FGL, a specialist in track design with an in depth knowledge of the national track and outdoor visitor structure standards, were commissioned to carry out this assessment. Their report is attached (attachment A). The following objectives were set for their work:

- Provide a safe and secure track that is easily navigable and enjoyable for a range of visitors.
- Provide a track that is consistent with the ‘Short Walk’ classification as per SNZ HB8630:2004 (standard for designing, constructing, maintaining, and/or managing tracks and outdoor visitor structures).
- Provide a track surface that is durable, has a low environmental impact and a low future maintenance cost.
- Develop a track that is well drained and provides good all year round use for a wide range of visitors.
- Minimise damage or disturbance to historic and natural features on this sensitive site in the vicinity of the track.

8. Given the topography of Pukekiwiriki Paa, the site and the extremely steep sided nature of the site there are only two road frontage locations where access to the Paa is realistically feasible.

Option 1

Renew and make safe the existing entrance track and access to the summit of the Paa – by upgrading the existing 91m long southern route track from Red Hill Road; including reshaping and surfacing the track, the installation of new boxed steps overtrop of the existing worn out stone steps, and the installation of a new 9m long timber staircase with two flights. (estimated cost of construction and professional services - $109,000 excluding GST)

Option 2

Formation of a new Northern route off Tanah Merah Drive into the reserve connecting to the summit of the Paa. This would involve the build of a new 199m long northern route track including new track benching and surfacing, the installation of new boxed steps through vegetated areas, and the installation of a new 44m long timber staircase with nine flights. (estimated cost of construction and professional services - $332,000 excluding GST)

9. Council’s Community Facilities Department determined that the existing path entrance and access to the summit of the Paa warranted renewal funding to eliminate the health and safety risks which now exist.
**Tātaritanga me ngā tohutohu / Analysis and advice**

10. FGL has produced a summary of the two feasible options, highlighting the advantages and disadvantages of both (page four of the feasibility report and as set out below) and recommended that option one be the preferred method to renew and improve the access into the Pukekiwiriki Paa Historic Reserve.

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| 1 | Upgrade the existing 91m long southern route track from Red Hill Road; including re-shaping and surfacing the track, the installation of new boxed steps overtop of the existing worn out stone steps, and the installation of a new 9m long timber staircase with two flights to avoid the steepest section. | • Lower estimated costs for both construction and professional services.  
• Minimal disturbance to vegetation.  
• No re-alignment of track bench required.  
• Recommended staircase re-alignment is on piles and will have minimal impact to the area below (easy construction possible from existing track).  
• No new track excavations are required (no new stabilisation issues).  
• Small slip that is present can be avoided (no geotechnical issues).  
• Existing parking present at reserve entrance adjacent to Red Hill Road.  
• Private encroachments issues at north end of site do not impact works.  
• Can install handrails and barriers to eliminate fall risk. | • Some impact to stone steps and known archaeological features.  
• Large roots on existing tracks (to be covered with fill). |
| 2 | Formation of a new 199m long northern route track from Tanah Merah Drive, including new track benching and surfacing, the installation of new boxed steps through vegetated areas, and the installation of a new 44m long timber staircase with nine flights. | • Avoids the exposed archaeological features that are present at the south end of the site.  
• Can install handrails and barriers to eliminate fall risk. | • Higher estimated costs for both construction and professional services.  
• New benching and vegetation removal required for new track location. Significant vegetation present (Pohutukawa etc.) in close proximity to the works.  
• Possible stability issues (Geotechnical engineering report required).  
• New staircase and benching will be visible from adjacent properties and Red Hill Road.  
• Close to private encroachment at east end of site.  
• Large staircase structure necessary with difficult access. |
11. It is recommended to the Pukekiwiriki Paa Joint Management Committee that option one is approved enabling immediate repairs and installation of new steps to be undertaken. On approval the Community Facilities Department will be advised of this decision to enable the necessary design and physical work to be implemented.

Ngā whakaaweawe ā-rohe me ngā tirohanga a te poari ā-rohe / Local impacts and local board views

12. The Papakura Local Board is aware of the disrepair and safety issues related to the entrance into Pukekiwiriki Paa and have advocated for this matter to be resolved.

13. Option one will ensure that the entrance to Pukekiwiriki Paa Historic Reserve will be repaired and improved to ensure safe public access into the reserve and onto the Paa summit.

Tauākī whakaaweawe Māori / Māori impact statement

14. The Pukekiwiriki Paa Joint Management Committee is a co-governance committee of Auckland Council involving iwi and the Papakura Local Board. The role of this committee is to determine governance and operational decisions in the management of Pukekiwiriki Paa Historic Reserve, a significant cultural site for iwi.

Ngā ritenga ā-pūtea / Financial implications

15. Community Facilities Department have confirmed that funding has been allocated to enable repairs and improvements to be made to the Pukekiwiriki Paa Historic Reserve entrance path and access to the Paa summit for health and safety reasons.

Ngā raru tūpono / Risks

16. The current access route is navigable by fit individuals with appropriate footwear and with confidence navigating steep uneven off road routes. It is not advisable that larger groups use this route unless taking care to use in single file. It is not considered safe to navigate in very wet conditions due to mud and slippery rock faces combined with the steep incline along parts of the route.

17. A sign is being placed on site to warn users of these limitations but as a publicly accessible site it is not possible to prevent visitors who are not appropriately attired or physically capable from using the current route. It is therefore recommended that, if option one is not approved, then it would be appropriate to prevent people from accessing the summit of the Paa over the wet winter months or until such time as the renewal project or a new access has been completed.
Ngā koringa ā-muri / Next steps

18. Should the Pukekiwiriki Pāa Joint Management Committee approve the proposed renewal project then the Community Facilities Department will be advised of the decision and asked to commence the necessary design, consenting and construction work outlined in the FGL Pukekiwiriki Track Feasibility Report.

Ngā tāpirihanga / Attachments

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Ngā kaihaina / Signatories

<table>
<thead>
<tr>
<th>Authors</th>
<th>Greg Lowe - Parks and Places Specialist (Parks Services)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorisers</td>
<td>Jane Aickin - Paeurungi Te Waka Tai-ranga-whenua</td>
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<tr>
<td></td>
<td>Mace Ward - General Manager Parks, Sports and Recreation</td>
</tr>
<tr>
<td></td>
<td>Manoj Ragupathy - Relationship Manager Manurewa &amp; Papakura</td>
</tr>
</tbody>
</table>
Frame Group Limited
P.O. Box 147-211, Ponsonby, Auckland 1144
Unit 2 Level 2, Foster’s House
16 College Hill, Ponsonby, Auckland
Ph: 0-9 638-7221 Fax: 0-9 376-0513

Jane Aickin
Pae-urungi Te Waka Tai-ranga-whenua
Manager Co-governance and Auckland Domain
Parks, Sport and Recreation Department
Auckland Council

Our Ref: 17/080
Date: 30 January 2018

Re: Pukekiwiriki Pa Track Feasibility Report

1.0 Summary

This report summarises an investigation by Frame Group Limited into options to establish a walking track that leads to the top of Pukekiwiriki Pa in Red Hill, Papakura; and complies with the requirements outlined for a ‘Short Walk’ as defined in the NZ Handbook for Tracks and Outdoor Visitor Structures (SNZ HB8630:2004).

This investigation included a review of the existing track to the Pa from the southern end of the reserve and an assessment of the possibility to construct a new track that commences at the northern end of the reserve; including a check to determine any possible consent requirements.

As a result of this review, the following two options have been considered feasible to provide this track:

- Option 1 – Upgrade the existing 91m long southern route track from Red Hill Road; including re-shaping and surfacing the track, the installation of new boxed steps overtop of the existing worn out stone steps, and the installation of a new 9m long timber staircase with two flights (estimated cost for construction and professional services - $109,000 excluding GST).
- Option 2 – Formation of a new 199m long northern route track from Tahan Maran Drive; including new track benching and surfacing, the installation of new boxed steps through vegetated areas, and the installation of a new 44m long timber staircase with nine flights (estimated cost for construction and professional services - $332,000 excluding GST).

The next step for this project is for the Papakura Local Board and the co-governance committee to select their preferred option. Detailed drawings, specifications and consent applications can then be prepared for this option prior to tendering the construction works.
2.0 Objectives

Based on the information we have been provided, we have assumed the following objectives for this project:

- Provide a safe and secure track that is easily navigable and enjoyable for a range of visitors.
- Provide a track that is consistent with the ‘Short Walk’ classification as per SNZ HB8630:2004.
- Provide a track surface that is durable, has a low environmental impact and a low future maintenance cost.
- Develop a track that is well drained and provides good all year round use for a wide range of visitors.
- Minimise damage or disturbance to historic and natural features on this sensitive site in the vicinity of the track.

3.0 Standard

SNZ HB8630:2004 classifies track users into User Groups based on the type of visitor, their physical capability and their level of self-reliance in the outdoors. Due to the suburban location of this site and the users seen during the investigation, we recommend that the track in and around Puakeiwiriki Pa classified as a ‘Short Walk’.

‘Short Walk’ users include both domestic and international tourists, as well as casual local visitors of all fitness levels. They utilise popular road edges for trips of an up to one-hour return journey for visits of short duration associated with rest stops, toilet stops, meal breaks or a natural attraction visit. Activities are usually passive to mildly active; including picnicking, photography, sightseeing, nature appreciation and short walks. These visitors require a high quality track surface. The least mobile of this group are commonly families with toddlers, younger age school parties, elderly people and in some cases people with disabilities.

The recommended design parameters for the track proposals are as shown in Table 1. These are recommended as a result of discussions with Auckland Council and from the evaluation of the likely visitor profile. These design parameters are the basis on which the proposed work and costs have been estimated.
Table 1 - Design Parameters

<table>
<thead>
<tr>
<th>Item</th>
<th>Design Parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width</td>
<td>Typically 1200mm.</td>
</tr>
<tr>
<td>Grade</td>
<td>Maximum 1 in 6 on track. Maximum 37 degrees on steps/staircases.</td>
</tr>
<tr>
<td>Track Surfacing</td>
<td>Typical minimum of 50mm thick surfacing of compacted, well graded aggregate; increased to 100mm thick where large roots are present (including on timber boxed steps).</td>
</tr>
<tr>
<td>Batter Slopes</td>
<td>Maximum fill batter slope of 1 vertical to 1.5 horizontal and maximum cut batter slope of 4 vertical to 1 horizontal.</td>
</tr>
<tr>
<td>Track Drainage</td>
<td>Consisting of a monoslope track shape to shed any water to one side and grade dips installed in low area to divert any runoff below the track.</td>
</tr>
<tr>
<td>Steps</td>
<td>Timber boxed steps with a handrail on one side or a timber staircase over steeper areas with handrails on both sides.</td>
</tr>
<tr>
<td>Vegetation</td>
<td>Clear vegetation around the track and up to 2.5m in height.</td>
</tr>
<tr>
<td>Marking and Signage</td>
<td>Markers not necessary (route clearly defined by the surface). Directional signage at junctions.</td>
</tr>
</tbody>
</table>

4.0 Description

Pukekiwiriki Pa is located in Red Hill, Papakura and contains just over 1.5 hectares of reserve land. The steep slopes along the edges of the Pa provided natural defences for the mana whenua that were originally here. The total Pa area was approximately 9 hectares; however the majority of this area is now subdivided with only the very top of the volcanic tufa and small amount of land below the steep slopes within the reserve. The Papakura Local Board is responsible for maintaining this Pa site, which is managed by a co-governance committee. The current entranceway is at the south end of the site, adjacent to Red Hills Road, up a steep track where natural steps have been cut into the existing rock. It is our understanding that in winter these rock steps become very slippery and concern has been raised on the safety aspect of this track due to a steep drop that is present on the downhill edge of the steps.

5.0 Options

Table 2 outlines two different options for providing pedestrian access to Pukekiwiriki Pa, including listing some of the advantages and disadvantages for each. Refer to the appended Options Plan drawing for the location of each option. Note that a third option was investigated from Tahan Maran Drive along the western boundary of the reserve; however this area has steep slopes below private residential houses with pohutukawa trees and other significant vegetation present on the bank. This option was dismissed on site due to the risk of causing stability issues during construction that may be caused by the removal of some of this vegetation and the necessary earthworks to form a track.
<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
</table>
| 1      | Upgrade the existing 91m long southern route track from Red Hill Road; including re-shaping and surfacing the track, the installation of new boxed steps overttop of the existing worn out stone steps, and the installation of a new 9m long timber staircase with two flights to avoid the steepest section. | • Lower estimated costs for both construction and professional services.  
• Minimal disturbance to vegetation.  
• No re-alignment of track bench required.  
• Recommended staircase re-alignment is on piles and will have minimal impact to the area below (easy construction possible from existing track).  
• No new track excavations are required (no new stabilisation issues).  
• Small slip that is present can be avoided (no geotechnical issues).  
• Existing parking present at reserve entrance adjacent to Red Hill Road.  
• Private encroachments issues at north end of site do not impact works.  
• Can install handrails and barriers to eliminate fall risk. | • Some impact to stone steps and known archaeological features.  
• Large roots on existing tracks (to be covered with fill). |
| 2      | Formation of a new 19m long northern route track from Tahan Maran Drive; including new track benching and surfacing, the installation of new boxed steps through vegetated areas, and the installation of a new 44m long timber staircase with nine flights. | • Avoids the exposed archaeological features that are present at the south end of the site.  
• Can install handrails and barriers to eliminate fall risk. | • Higher estimated costs for both construction and professional services.  
• New benching and vegetation removal required for new track location. Significant vegetation present (pohutukawa, etc.) in close proximity to the works.  
• Possible stability issues (Geotechnical engineering report required).  
• New staircase and benching will be visible from adjacent properties and Red Hill Road.  
• Close to private encroachment at east end of site.  
• Large staircase structure necessary with difficult construction access and specialist abseil team required.  
• The entire reserve area is noted as an archaeological site. Accidental discovery likely during excavations.  
• Limited existing parking present near Tahan Maran Drive. Street is narrow and residents will be impacted by increased user numbers.  
• Greater resource consent requirements. |
6.0 Preliminary Estimates

The estimated cost of construction and professional services for both options have been prepared.

6.1 Construction Cost Estimate

Detailed preliminary construction cost estimates for each option are appended to this report. They are summarised as follows:

- Option 1, Existing Southern Route - $65,000
- Option 2, New Northern Route - $234,000

Note that the above construction cost estimates exclude GST and include a 15% contingency. They are based on current contractor rates for similar construction projects in the Auckland area; and do not include provision for the installation of signage, plantings, viewing areas and other landscape items.

6.2 Professional Services Estimate

The estimated costs of professional fees that are expected to be necessary for each option are shown in Table 3 and 4 (note that these are estimates only and shall not be considered as a quote for services).

<table>
<thead>
<tr>
<th>Table 3 – Option 1, Estimated Cost of Professional Services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Item</strong></td>
</tr>
<tr>
<td>Setting out, survey and design of walkway and structures</td>
</tr>
<tr>
<td>Consultation and mana whenua fees</td>
</tr>
<tr>
<td>Arborist investigation, report and monitoring</td>
</tr>
<tr>
<td>Archaeologist assessment, Heritage NZ Authority and monitoring</td>
</tr>
<tr>
<td>Resource consent application preparation, lodgement and fees</td>
</tr>
<tr>
<td>Building consent application preparation, lodgement and fees</td>
</tr>
<tr>
<td>Tender and contract management services</td>
</tr>
<tr>
<td>15% contingency (rounded)</td>
</tr>
<tr>
<td><strong>Total Estimated Cost of Professional Services:</strong></td>
</tr>
</tbody>
</table>
Table 4 - Option 2, Estimated Cost of Professional Services

<table>
<thead>
<tr>
<th>Item</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting out, survey and design of walkway and structures</td>
<td>$20,000</td>
</tr>
<tr>
<td>Consultation and mana whenua fees</td>
<td>$5,000</td>
</tr>
<tr>
<td>Arborist investigation, report and monitoring</td>
<td>$8,000</td>
</tr>
<tr>
<td>Geotechnical Engineer investigation</td>
<td>$8,000</td>
</tr>
<tr>
<td>Archaeologist assessment, Heritage NZ Authority and monitoring</td>
<td>$5,000</td>
</tr>
<tr>
<td>Resource consent application preparation, lodgement and fees</td>
<td>$10,000</td>
</tr>
<tr>
<td>Building consent application preparation, lodgement and fees</td>
<td>$4,000</td>
</tr>
<tr>
<td>Tender and contract management services</td>
<td>$25,000</td>
</tr>
<tr>
<td>15% contingency (rounded)</td>
<td>$13,000</td>
</tr>
<tr>
<td><strong>Total Estimated Cost of Professional Services:</strong></td>
<td><strong>$98,000</strong></td>
</tr>
</tbody>
</table>

The above professional services cost estimate excludes all internal council costs and assumes that the resource consent can be lodged as a non-notified application. If a notified resource consent becomes necessary, it is expected that the estimated cost for additional professional services of either option could increase by up to $50,000 (excluding GST).

7.0 Consent Requirements

A summary of the expected resource consent requirements for this track is as follows:

7.1 Auckland Council Resource Consent

A resource consent application will be necessary for both options. Refer to the appended Resource Consent Summary prepared by Southern Skies Environmental Limited for a summary of resource consent requirements from the Auckland Unitary Plan. This summary also includes a list of mana whenua that will need to be consulted with prior to logging the application.

7.2 Building Consents

Under the Building Act, an Auckland Council Building Consent will be necessary for any structure that is not exempt under Schedule 1 of the Act. This means that structure from which it is possible to fall more than 1.5m will require a Building Consent. For this project, Building Consent will be required for the following works:

- Option 1 - To install a 9m long by 1.2m wide staircase with 2 flights avoiding rock steps.
- Option 2 - To install a 44m long by 1.2m wide staircase with 9 flights up steep bluff.
7.3 Heritage NZ Authority
Due to the archaeological significance of this site it is likely that a Heritage NZ Authority will be required for both options. To complete this, an archaeologist shall be engaged to complete an assessment of the proposed work to determine what impact the construction works will have to any archaeological sites. Consultation with mana whenua will also be necessary to form part of this authority application.

8.0 Recommendation
It is recommended to proceed with Option 1 to upgrade the existing track at the southern entrance. In addition to Option 2 having a higher construction cost, there are many issues and risks associated with Option 2 (such as instability, vegetation removals, lack of parking, greater resource consent requirements, etc.) that make Option 1 the preferred option.

Once Auckland Council has obtained the stakeholder's feedback on this report, determined the preferred option and sourced funding for this project, the recommended next action steps are as follows:

- Complete detailed setting out and a profile survey for the preferred option.
- Carry out consultation with any affected parties including iwi, residents, etc.
- Engage an Arborist to assess any impacts to vegetation to the chosen route.
- Engage a Geotechnical Engineer to provide advice on the site stability and foundation requirements for the staircase (Option 2 only).
- Prepare design drawings, specification and construction cost estimates for the preferred option; including preparing detailed calculations and providing producer statements for the staircases.
- Engage an Archaeologist to assess any archaeological sites that may be impacted by the proposed works and apply for a Heritage NZ authority.
- Prepare and apply for all required building and resource consents.
- Tender and manage the physical works.

9.0 Appended Items
- Attachment A – Option 1 and 2 Photos
- Attachment B – Example Photos
- Attachment C – Option 1 and 2 Preliminary Construction Cost Estimates
- Attachment D – Resource Consent Summary
- Attachment E – Options Plan

Drew Kenny
Consultant, Frame Group Limited

Frame Group Limited
Pukekiwiriki Paa Track Feasibility Report

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Option 1 Photos

Existing track entrance

Reshape track over roots

Grade track up slope

Install staircase over rock steps

Install new boxed steps over rock steps

Install boxed steps into Pa
Option 2 Photos

Proposed track entrance at road

Encroachment on eastern side

Track through dead tree

Possible staircase up bluff

Steep slope at top of bluff

View of bluff from Red Hill Road
Example Photos

Monoslope shaped track over roots
Track with edge board

Boxed steps with handrail one side
Boxed steps fixed to rock

Staircase with barrier both sides
Multiple flight staircase up bluff

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