



## **Terms of Reference – Geotechnical Investigation**

Public Rental Board (PRB), a Commercial Statutory Authority established to provide affordable rental flats to low-income earners invites tenders from registered and reputable Geotechnical engineers to provide a fee to assess the subsurface conditions of the Proposed Naikawakawa Development site and provide valuable information for engineering design and construction planning.

PRB's initiative is to undertake the Major Residential development which consist of 10 story buildings, facilities, amenities, services, sustainable energy growth & gray water harvesting.



**Figure 1 – Locality Plan**

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The design is developed taking in mind a “Smart Build” concept which target buildings to be constructed with medium to high end quality and at the most economical cost of construction that is affordable to our customers. The design will also been carefully assessed to meet all standards of the National Building Code and play an important role in enhancing PRB’s vision of providing quality housing that is affordable.

The Geotechnical Engineer shall provide professional engineering services for the Proposed Development at Naikawakawa - Grantham Road, Raiwaqa, Fiji Islands.

The Geotechnical Engineer is expected to carry out preliminary study of the existing underground infrastructure and/or utility services prior to carrying out any site investigation work and is required to take all precautionary health and safety measures during geotechnical investigation works. Any plans or existing services information is to be obtained by the Geotechnical Engineer through the various infrastructure & utility departments directly.

### **GEOTECHNICAL INVESTIGATION & REPORTING – SCOPE OF WORKS**

The reporting work should cover, but shall not be limited to the following aspects for a detailed geotechnical investigation, testing, and reporting work:

1. Subsoil profiling from tests and inferred data with cross-sections across the entire site, covering all proposed building platforms and the overall development area, to illustrate soil stratification and approximate depths to bedrock.
2. All necessary testing, including test pits, boreholes with associated laboratory and in-situ tests, and any additional investigations deemed necessary. Testing shall be representative of building platforms and site infrastructure requirements. A minimum of 2 boreholes to 10m depth and DCP testing to 5m is recommended; however, the Geotechnical Engineer may increase or adjust the extent of testing to achieve adequate decision-making data. A rate per linear metre shall be provided for drilling where borehole depth varies. Boreholes are intended to be drilled to bedrock.
3. Assessment of subsurface ground conditions.
4. Recommendations on suitable foundation systems and options (e.g., shallow, raft, or piled foundations), including allowable bearing capacities and relevant design parameters.
5. Provision of all geotechnical data required for the design of retaining walls.
6. Assessment and indication of total and differential settlements for proposed structures under shallow and raft foundations.
7. Identification and reporting of groundwater levels across the site.
8. Provision of California Bearing Ratio (CBR) values where applicable for slab-on-grade and pavement design.
9. Recommendation of Finished Floor Levels (FFL) for all buildings and parking areas, considering flood levels and any related constraints.

10. Detailed pile design recommendations, providing options for different pile types and their estimated load-carrying capacities.
11. Advisory assessment of liquefaction potential on the site.
12. Advisory assessment and analysis of potential lateral spreading of subsurface materials, including pile design requirements to resist such lateral forces.
13. Construction recommendations for site earthworks, including compaction criteria and ground improvement measures where necessary.
14. Provision of seismic design parameters specific to the site conditions.
15. Identification of any geotechnical issues encountered or inferred during investigation, along with any potential risks that may arise during construction.

### **Conditions of Engagement: Geotechnical Engineering**

The Geotechnical Consultant shall provide a Lump Sum Price to carry out the Detailed Geotechnical Investigation/Reporting with inclusion of any rates for borehole drilling, etc. allowed for or provide breakdown summary base on the scope of work.

The Consultant shall submit rates for this assignment for each of the personnel nominated by the Consultant who shall be participating in the project. Costs/rates shall also be included for disbursements associated with this project.

The following SPECIAL TERMS & CONDITIONS shall apply and to be included in the Fee Proposal.

- Liaising and making necessary arrangements with borehole rigger.
- Liaising and making necessary arrangements with utility service providers to determine underground services.
- Taking all precautionary OHS measures during field investigations.
- A program needs to be submitted together with the Fee Proposal to indicate timelines for mobilization on site, field and laboratory testing and reporting. Please indicate a timeline to provide draft and final reports.

### **Confidentiality**

The consultants should note carefully that this project is of a highly sensitive nature and shall not discuss any aspect of this project either during the fee submission stage or subsequently with anyone other than the client and project managers.

The consultant will be required to sign a non-disclosure agreement with the client to protect the client's interests, safeguard all confidential project information, and ensure that no data, documents, or proprietary materials are disclosed to any third party without prior written consent.

**Payment Drawdown Schedules:**

<b>No.</b>	<b>Description</b>	<b>Cost</b>
1	<b>Project Mobilization &amp; Preliminary Review</b> <ul style="list-style-type: none"> <li>• Site handover</li> <li>• Review of available documents (EMP)</li> </ul>	
2	<b>Field Investigation Works</b> <ul style="list-style-type: none"> <li>• Test pits, boreholes, DCP tests, groundwater observations</li> <li>• Sampling and logging</li> </ul>	
3	<b>Laboratory Testing</b> <ul style="list-style-type: none"> <li>• Soil classification tests</li> <li>• CBR tests</li> <li>• Any required strength / consolidation tests</li> </ul>	
4	<b>Preliminary Geotechnical Findings</b> <ul style="list-style-type: none"> <li>• Subsurface profiling</li> <li>• Groundwater data</li> <li>• Initial foundation considerations</li> <li>• Integration of EMP constraints</li> </ul>	
5	<b>Draft Geotechnical Report</b> <ul style="list-style-type: none"> <li>• Full geotechnical analysis</li> <li>• Settlement assessments</li> <li>• Liquefaction &amp; lateral spread assessment</li> <li>• Preliminary seismic parameters</li> <li>• Initial recommendations for foundation, piles, retaining walls</li> </ul>	
6	<b>Presentation to Client and Final Geotechnical Report</b> <ul style="list-style-type: none"> <li>• Finalized design recommendations.</li> <li>• Final seismic parameters</li> <li>• Final FFL recommendations</li> <li>• Earthwork &amp; compaction requirements</li> <li>• Integration of all EMP mitigation measures</li> <li>• Written confirmation that all engineering recommendations (foundation, piling, retaining walls, pavement, earthworks) are based fully on geotechnical results &amp; EMP</li> </ul>	
<b>Total Cost (VIP)</b>		

**Tenders shall include but not limited to the following:**

1. Consultant/ individual profiles
2. Company Registration & TIN Letter
3. A valid certificate of registration and must be a member of the Fiji
4. Certificate of Exemption
5. Past work Experience
6. Human Resources break down
7. Liability Insurance
8. OHS certification
9. Timeline

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- 10. Assumptions
- 11. Limitations
- 12. Fees and charge

### **Tender Requirements**

1. The consultant shall be a recognized member of the Fiji Institute of Engineers (FIE). A copy of the FIE membership certification shall be attached with the tender submission.
2. The tender submitted shall not exclude any items listed above (Please indicate clearly if required items are excluded in the fee proposal).

Tender submission is to be marked **“Tender 25/25: Naikawakawa Site Geotechnical Investigation”** and addressed to:

**The General Manager  
Public Rental Board  
PO Box 5275  
Raiwaqa.**

and all submission will be accepted and shall be uploaded to the PRB website [www.prb.com.fj](http://www.prb.com.fj) no later than **4.00pm on Friday 19<sup>th</sup> December 2025**.

**PRB reserves the right to reject any tender. The lowest or any other offer shall not necessarily be accepted. Late tender submission will be disqualified.**

### **Attachments:**

1. *Environmental Management Report*