Subdivision of

PRB Site Namelimeli, (Lobau Bridge)

Draft

DESIGN FEASIBILITY REPORT

20 NOVEMBER 2025

PREPARED FOR: PUBLIC RENTAL BOARD, SUVA

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DOCUMENT CONTROL

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Draft 2	20/11/25	MM	13 pages + attachments	MM	20/11/25
Draft 3	27/11/25	MM	15 pages + attachments	MM	27/11/25

1.0 INTRODUCTION

The following feasibility report considers options for the residential subdivision of the Public Rental Board property in Namelimeli, outside of Navua and near to the Lobau River Bridge.

This project involves the development of a 10acre native lease land parcel at Namelimeli. Beyond providing shelter, the project aims to provide a housing settlement with green spaces, communal areas and disability access to ensure inclusivity and promote social cohesion.

Low-income families often struggle to secure decent accommodation due to rising housing cost and limited housing stock in Fiji. Social housing subsidized residential units provided at affordable rents supports those unable to compete in the private market.

The project aims to provide housing for families, enhance the local community with quality living spaces under public rental and first homeowners scheme

1.1 ABOUT PRB

Public Rental Board (PRB) was established in 1989 under the Housing (Amendment) Decree No. 12 of 1989. The Housing (Amendment) decree is part of the Housing act of 1955. The Board was established to provide affordable accommodation to low income earners without incurring a loss.

Under section 34 of the Amendment Decree, the Board is principally required to operate on a non-commercial basis by inviting Government to make good the shortfall (where the assessed rental applicable to a tenancy represents a disproportionate percentage of earnings) by the way of subsidy.

1.2 REPORT OBJECTIVE

The objective of the report is to provide design options and residential yields for the land subdivision together with confirming engineering, infrastructure and development constraints.

1.3 LAND SALES

PRB intend a carry out a campaign of land sales for the subdivided land offering the following options:

- Simple land sales, or
- Sales packages of house and land.

The target consumers are intended to be:

- First home owners, and
- Residents relocating from housing settlements in Suva.

1.4 ESTATE MANAGEMENT

A primary lease holder, PRB are proposing to be the manager for the estate and will manage and maintain the infrastructure in line with the general housing portfolio across Fiji.

2.0 EXECUTIVE SUMMARY

This report provides subdivision options for a PRB site at Namelimeli. The scope of the report covers preliminary design brief, land subdivision options and an outline of associated technical constraints to deliver the subdivision.

A number of subdivision options were initially considered and this report presents two of those options:

- Option 1 yielding 38 residential lots plus 3 commercial /communal lots, and
- Option 5 yielding 62 residential lots plus 3 commercial /communal lots.

The options have varying lot sizes based on differing wastewater systems with:

- Option 1 based on each site having its own separate septic tank with options to separate grey and black water.
- Option 5 based on communal septic tanks with options to separate grey and black water.

The report recommends option 5 as the preferred subdivision arrangement at this point pending final information for the following reasons:

- The smaller lot sizes (approx. 440 sqm) allow for a higher residential yield maximizing site use and retains the necessary communal and public spaces.
- The communal septic tank system is more cost-effective and environmentally responsible, managing wastewater better than individual tanks in this low-lying and geotechnically sensitive area.
- The development better supports first home owners and residents relocating from settlements by offering smaller affordable housing options aligned with PRB objectives

The report recommends a project delivered in 5 stages as follows:

- Stage 1 – feasibility & funding approval,
- Stage 2 – plan of subdivision and permit,
- Stage 3 – reclamation & civil works,
- Stage 4 – subdivision sales & marketing, and
- Stage 5 – residential development.

Activity	'25	2026				2027				2028				'29
Feasibility & Funding														
Subdivision & Permit														
Reclamation & Civil Works														
Land Sales														
Residential Development														

At this point the recommendation section of the report is incomplete and pending final information. This section recommends a range of enabling works to assist in the report completion and project implementation including:

- Civil Works (Site preparation),
- Environmental & Traffic Impact Assessment, and
- Peripheral Survey.

3.0 SITE & CONTEXT

3.1 LOCALITY

Namelimeli is located on the outskirts of Navua near the Lobau River Bridge. The site is approximately 250 metres north of the Queens Road on a gravel access road.

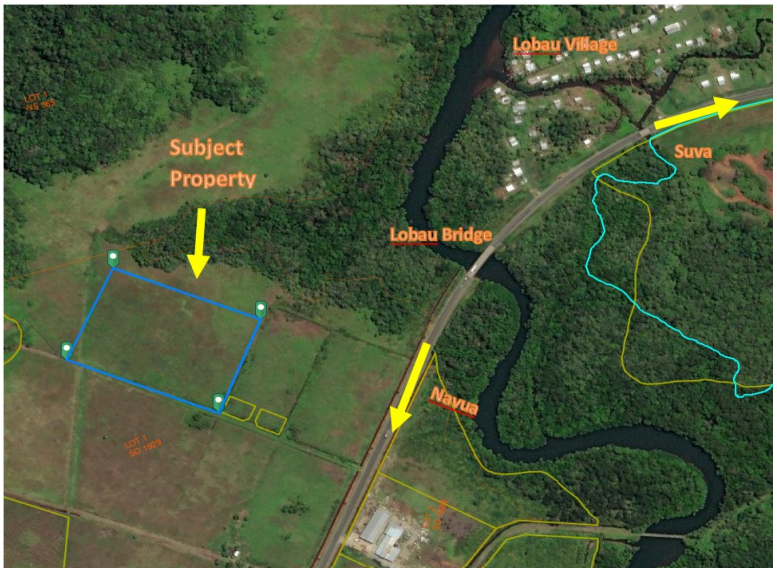

Image: Locality Plan

3.2 SUBJECT SITES

The subject site has an area of approximately 43,163 sqm (4.3163 Ha) and is currently vacant in low lying land adjoining the Lobau River.

3.3 SITE BOUNDARIES & LEVELS

A land title is included in the attachments.

The site topography and levels survey have not been completed and is required to confirm site and flood levels.

3.4 ACCESS

The site is accessed via a single gravel road from Queens Road.

4.0 DESIGN BRIEF

The general design brief for the redevelopment is to provide options for mixed use development across both sites including commercial and residential, together with any required public open space, roads and car parking in accordance with town planning requirements.

4.1 SUBDIVISION BRIEF

Develop residential subdivision confirming the following:

- Options for Residential sites,
- A Community Services site (nom 1000 sqm),
- A Community Hall site (nom 1000 sqm),
- A Commercial site (nom 1000 sqm),
- Public Open Space (5%), and

- Roads to site access and provide site frontages.

4.1.1 First Home Owners

The aim of this subdivision is to optimise the number of home sites for first home buyers with either simple land sales or house and land packages.

4.1.2 Septic Tank Alternatives

Provide subdivision options for:

1. Standard subdivision with each site having a septic tank (800 sqm sites).
2. Optimum subdivision for communal septic tank (400-600 sqm sites).

4.2 PUBLIC OPEN SPACE DESIGN BRIEF

Provide public open space as required by the planning scheme with a total of 5% of site area.

Site	Site Area	Public Open Space Area (5%)
TOTAL	41,163 sqm	2,058 sqm

4.3 COMMUNITY BURE BRIEF

Provide resident communal bure adjoining to each estate with the following.

- Ground Floor:
  flexible and connected multi rooms suitable for larger public meetings/gatherings. These areas will also accommodate child care functions for PRB residents during the daytime, allow:
  - Access verandah
  - 2 multi purpose rooms – nom 60 sqm, with operable sliding doors.
  - Provide adjoining toilets and utility rooms to future detail.
- Preliminary Functional Area Schedule (nett area):

Room	Ground	
2 MP Rooms	120	
Utility Rooms	10	
WC's	40	
Circulation & Walls	30	
Total (grd)	**200**	(sqm)

Coordinate location to be near or adjacent to Public Open Space.

5.0 SUBDIVISION OPTIONS

A range of subdivision layouts HAVE BEEN considered and this report presents the following options.

5.1 SUBDIVISION - OPTION 1

5.1.1 800 sqm Residential Sites

Typically this option provides nominal 800 sqm residential sites together with a range of community and local commercial sites in line with the brief.

See sketch drawings in the attachments for site plan arrangement.

5.1.2 Individual Septic Tank

This option is a default subdivision where each buyer establishes their own septic tank system as part of the house build.

5.1.3 Wastewater Separation

Each site would each site having a separate septic tank with the option of separating grey and black water.

5.1.4 Site Area Schedule & Yield

Use	Quant	Site Area (sqm)	Total Area (sqm)	%	Comments
Residential Sites	38x	nom 800	28,852	70.1%	
Commercial Sites	1x	950	950	2.3%	
Community Services Site	1x	1,030	1,030	2.5%	
Community Hall Site	1x	1,030	1,030	2.5%	
Public Open Space	1x	2,180	2,180	5.3%	
Roads			7,121	17.3%	
Total Site Area			**41,163**	**100.0%**	

5.1.5 Access & Roads

Road	Width
Loop Road	12 metres
Cross Road	9 metres

5.2 SUBDIVISION OPTION 5

5.2.1 440 sqm Residential Sites

Typically this option provides nominal 440 sqm residential sites together with community and local commercial sites in line with the brief and assumes approved communal septic tank systems.

See sketch drawings in the attachments for site plan arrangement.

5.2.2 Communal Septic Tank

This option allows for optimum subdivision of the land by adopting communal septic tanks to be established as part of the subdivision infrastructure.

5.2.3 Value for Money

A cost analysis of this option is required to verify if the communal septic tank system approach represents value for money.

5.2.4 Wastewater Separation

It is anticipated the wastewater from each site would be separated into grey and black water to reduce the capacity of septic tank treatment (black water) and site dispersal.

5.2.5 Site Area Schedule & Yield

Use	Quant	Site Area (sqm)	Total Area (sqm)	%	Comments
Residential Sites	60x	nom 400	29,006	70.5%	
Commercial Sites	1x	950	949	2.3%	
Community Services Site	1x	883	883	2.1%	Religious & Community Sites
Community Hall Site	1x	1100	1,100	2.7%	Religious & Community Sites

Public Open Space	1x	2180	2,180	5.3%	
Roads			7, 045	17.1%	
Total Site Area			**41,163**	**100.0%**	

5.2.6 Access & Roads

Road	Width
Loop Road	12 metres
Cross Road	9 metres

5.3 PREFERRED SUBDIVISION - OPTION 5

The preferred subdivision arrangement is Option 5 for the following reasons:

1. The smaller lot sizes (approx. 440 sqm) allow for a higher residential yield maximizing site utilization and retains the necessary communal and public spaces.

2. The communal septic tank system is more cost-effective and environmentally responsible, managing wastewater better than individual tanks in this low-lying and geotechnically sensitive area.

3. The development better supports first home owners and residents relocating from settlements by offering affordable housing options aligned with PRB objectives.

6.0 HOUSE & LAND PACKAGES

PRB are considering offering house and land packages as part of the land sales. This would see the house construction undertaken by PRB and simplifying procurement of builders for prospective buyers and . . . .

Two housing products have been developed and preliminary drawings are included in the attachments.

6.1 2 BEDROOM HOUSE

The design proposal for this house is a compact 2 bedroom plan of approximately 60 sqm plus a verandah. The construction system is proposed to be a kit timber frame over a framed floor or concrete slab.

6.2 3 BEDROOM HOUSE

The design proposal for the 3 bedroom house includes a functional layout with approximately 80 sqm of internal living space plus an outdoor verandah. This design provides additional living space to accommodate larger families, aligning with PRB's focus on affordable housing solutions.

6.3 FOUNDATION SYSTEMS

The engineering advice is for houses to a maximum 2 storeys and of lightweight construction. The houses are proposed to be founded within the engineered fill.

6.4 CONSTRUCTION SYSTEMS

Construction will be lightweight timber framing suitable for single and double storey, adaptable to the engineered fill foundation as recommended by geotechnical advice.

6.5 KIT HOUSE SYSTEMS

Preliminary review of potential suppliers of house kits was carried out with the following conclusions.

Kit Supplier

WOOD EXCHANGE PTE LTD are a timber processor located at n Tamavua, Suva. They have provided a proposal to supply PRB with Mahogany Home Kits (timber framing) for use in the construction of house and land packages at Namelimeli and other locations. Wood Exchange can tailor house kits to PRB design as required.

They appear to be a viable option for the supply of house kits and can either:

- supply the kits only, or
- supply and fabricate houses on site.

Further detail investigation is required to verify quality of timber components and roof truss designs. Other suppliers will also be approached to provide alternative suppliers and to maintain competitive pricing.

7.0 TOWN PLANNING

Following consultation with the Directorate of Town and Country Planning (DTCP), Subdivision and Planning Officer we confirm the following requirements and processes for approval of residential subdivisions.

The agreed requirements are as follows.

7.1 Lease Agreement,

The current lease agreement for the site is for commercial purposes only, and this will need to be modified to include residential in any subdivision application.

7.2 Referral Bodies

Prior to DTCP approval of the Plan of Subdivision the following referral bodies will be consulted:

- I-Taukei Land Trust Board.
- Ministry of Health (if a Communal Septic Tank System is proposed).
- Fiji Road Authority (Road Design).
- Electricity Fiji Limited.
- Water Authority of Fiji.
- Lami Town Council.

The Plan of Subdivision is to be submitted to Lami Town Council however it will be assessed by DTCP (Suva head office).

7.3 Elements of Subdivision Submission

- Confirm Plan of Subdivision
  - Plan of Subdivision prepared by registered surveyor and is to stipulate location of each zoning type (residential / community / commercial).
- Confirm Residential Lot Size
  - Typically the minimum lot size for residential sites is 800 m².
  - Under the Town and Country Planning Act the minimum lot size can be reduced to 600 m² (Res B), where a communal septic tank is provided.
  - A further relaxation of this requirement can be requested subject to the support of the communal septic system design by the Ministry of

Health. This provides the potential to reduce the lot size to 400 m² (Res C).

- Confirm Roads
  - Road widths are determined by the amount of lots being serviced. Preliminary advice is 12m however a relaxation can be sought through Fiji Road Authority (FRA).
- Confirm Public Open Space
  - Public Open Space requirements are confirmed at 5%.
- Confirm Lease Agreement
  - Update lease to include residential in the subdivision application.

7.4 Roads

Type	Reserve Width	Carriageway	Footpath / each	Other
District Road (thru)	20 meters	13 meters	1.5 meters	
		7 meters	1.5 +1.5 meters	
Local Road (thru)	16 meters	10 meters	1.5 meters	
	12 meters	6 meters	1.5 + 1.8 meters	
Access Road (thru)	7 meters	5 meters	1.5 meters	
Cul de sac	6 meters	4 meters	1.5 + 1.8 meters	Max 100 units

8.0 GEOTECHNICAL & LAND RECLAMATION

8.1 INITIAL GEOTECHNICAL ADVICE

A geotechnical report was prepared by Engineered Designs in June 2025. This report outlined the following key challenges for redevelopment of the land for residential purposes.

- The site levels are low and there was latent surface ground water across the site during testing.
- Tidal Flooding is anticipated from adjoining drains that extend to the nearby Lobau River.
- There is latent liquefaction potential due to extensive soft soils.
- The site has a marine deposit stratum of over 10 metres deep (and rock may be at 30 metres deep).
- The latent geotechnical conditions are unsuitable for supporting buildings without deep footing or piling systems.
- Alternatively reclamation earthworks to a minimum fill depth of 1.8 metres, which could support single and double storey buildings of lightweight construction.
- The site has naturally poor drainage and attention will be required in reclamation and development for new drainage systems to direct water to suitable discharge areas.

8.2 UPDATED GEOTECHNICAL ADVICE

Following further consultation with Engineered Designs, they provided a letter of advice dated 26 September 2025 to refine the initial advice as follows:

- The reclamation fill level depth is amended to a minimum of 1.3m and fill zones may be restricted to roads and building zones.

- Inground infrastructure will require waterproofed concrete trenches with metal pipes.
- Sub-division and upgrade of the site may not be viable and cost prohibitive and they recommend:
  - consideration of an alternative site, and
  - pre-feasibility study be developed to determine the costs.
- Preferred construction methods for ground floors is:
  - Concrete raft slab on ground with lightweight construction over to maximise the spread of the load on the site fill.
  - Timber floors with lightweight construction over may be possible with detail design and bracing developed to minimise point loads on site fill (weight bearing on individual posts).
- Communal septic tank systems to be designed to cope with high water table is recommended.

8.3 CONCLUSION

Due to geotechnical challenges accross the site it is recommended that prior to progressing any further with subdivision planning, the cost of establishing infrastructure and site reclamation works be confirmed.

This will enable effective and informed decisions on the density, type and scale of buildings most suited to the providing affordable housing in this location.

8.4 LAND RECLAMATION

Refer Geotechnical report and later advice letter for details.

Scope of Work based on geotechnical advice.

Layer	Amended Advice	Work/ Materials	Scope
	- 300mm	Strip 300mm	Strip top soil and stockpile for reuse
Layer 1	N/A	Bidim A34 Geotextile	Below Roads & Building Zones
Layer 2	+ 300 Deep	150mm quarried cobbles	Throughout
Layer 3	+ 200 Deep	Rolled / GAP 65	Throughout
Layer 4	N/A	Tensar Tri-Ax (TX160)	Below Roads & Building Zones
Layer 5	+ 450 Deep	150 layers / Approved Fill	Throughout
Layer 6	+ 450 Deep	150 layers / Compacted Fill	Throughout
Layer 8	+ 300 Deep	Top soil from stockpile	Throughout, except for roads
Total	**+1400 Deep**		

Site level for drainage

9.0 ROADS & DRAINAGE

PRB will be responsible for design and installation of all roads and drainage. This work will be done prior to settlement of land sales. The management of roads is under discussion with Fiji roads authority with the following options considered.

9.1 FIJI ROADS AUTHORITY ADVICE

9.1.1 Privately Maintained Road Option

Under this option:

- PRB will be fully responsible for the construction, upkeep, and maintenance of the onsite roads.
- Roads to be designed for internal estate use and must follow basic engineering standards suitable for residential access.
- As the roads fall under PRB's jurisdiction, FRA approval is not required. However, PRB must allocate resources for ongoing maintenance and repairs.

9.1.2 Publicly Maintained Roads

Under this option:

- Roads must meet FRA's design and safety standards, with the intention of handing them over to FRA for long-term maintenance.
- Compliance with FRA specifications is required, including a 16m reserve and chip seal finish access road and 12m roads within residential areas. These dimensions cover the full road width, road reserve, and pedestrian pathways.

9.2 ACCESS ROAD UPGRADE

The existing access road from Queens Road is approximately 500 metres long.

The preference is for this road to be a Fiji Roads Authority road, with 16 metre wide a reserve and a 10 metre road width.

The road level to be above the flood level (1.3 metre above natural ground level).

The Scope of Work for this road upgrade is to be confirmed.

9.3 NEW SUBDIVISION ROADS

The preference is for the subdivision roads to be private roads in accordance with Town and Country Planning Act as follows:

Type	Reserve Width	Carriageway	Footpath / each	Other
District Road (thru)	20 meters	13 meters	1.5 meters	
		7 meters	1.5 +1.5 meters	
Local Road (thru)	16 meters	10 meters	1.5 meters	
	12 meters	6 meters	1.5 + 1.8 meters	
Access Road (thru)	7 meters	5 meters	1.5 meters	
Cul de sac	6 meters	4 meters	1.5 + 1.8 meters	Max 100 units

The road level to be above the flood level (1.3 metre above natural ground level).

The Scope of Work for these roads upgrade is to be confirmed.

9.4 ROAD DRAINAGE

The geotechnical report requires road and other stormwater drainage to direct water to suitable discharge areas, site dispersal or soaker pits are not suitable.

10.0 INFRASTRUCTURE

PRB will be responsible for design and installation of all subdivision infrastructure. This work will be done prior to settlement of land sales.

10.1 ELECTRICAL SUPPLY

PRB are in discussion with the power authority about the extension of power supply to the site (estate), which may include a transformer and/or sub station. PRB will be responsible for the reticulation to lot, to future detail.

10.2 WATER SUPPLY

PRB are in discussion with the water authority about the extension of water supply to the site (estate). PRB will be responsible for the reticulation to lot, to future detail.

10.3 WASTE TREATMENT (SEPTIC TANKS)

Waste treatment will be reticulated to each subdivided lot, to future detail.

10.3.1 Authority Advice

Two options for septic tank systems are under consideration and the final decision will be based on specialist consultant advice and the approval of the Ministry of Health (MOH) as follows:

10.3.2 800 sqm Lot Subdivisions

Adopt an individual septic tanks for each site as follows:

- Provide 20% of the land area for septic tank and dispersal (160 sqm).
- Install above the required flood level.
- System to be designed and constructed by a specialist contractor.
- Size in accordance with FNBC (Building code).
- Installation in accordance with FNBC (Building code).

10.3.3 400 sqm Lot Subdivisions

Adopt Communal Septic Tank - 1x tank<15 Lots as follows:

- Provide 50<70 m²/lot land area for septic tank and dispersal.
- Each lot to accommodate a maximum of 6 people.
- Tank capacity and dispersal system to be confirmed by an hydraulics specialist.
- Install above the required flood level.
- System to be designed and constructed by a specialist contractor.
- This option requires a detailed assessment and approval from both the Ministry of Health and the Ministry of Environment, due to possible environmental impacts.

10.3.4 Greywater

The option to split greywater and blackwater is being considered and requires clarification from a specialist consultant and is to consider

- dispersal on lots, and
- impact of dispersal on the land fill.

10.3.5 Geotechnical Conditions

Generally the installation requirements for septic tank systems needs more clarification from the geotechnical engineer to manage the impact on reclamation works.

11.0 EVIRONMENTAL IMPACT ASSESSMENT (EIA)

This report is pending and awaiting the appointment of a specialist consultant. The general terms of reference (TOR) is included in the attachments.

12.0 PLAN OF SUBDIVISION

This report is pending and awaiting the appointment of a specialist consultant. The general terms of reference (TOR) is included in the attachments.

13.0 DELIVERY STRATEGY

We anticipate the project delivery will be in 6 stages:

- Stage 1 – feasibility & funding approval,
- Stage 2 – plan of subdivision and permit,
- Stage 3 – reclamation & civil works,
- Stage 4 – subdivision sales & marketing, and
- Stage 5 – residential development.

13.1 STAGE 1 - FEASIBILITY & FUNDING

Scope & Timeline

This stage of the project is anticipated to consist of:

- Approval of Feasibility Design Report,
- Funding Approval, and
- is anticipated to be 3 months.

13.2 STAGE 2 – PLAN OF SUBDIVISION & PERMIT

Scope & Timeline

The stage is anticipated to consist of:

- Surveyors Plan of Subdivision,
- Subdivision Application & Approval, and
- is anticipated to be 6 months.

13.3 STAGE 3 - RECLAMATION WORKS

Scope & Timeline

This stage of the project is anticipated to consist of:

- Site reclamation & consolidation,
- Installation of site utilities,
- Site settlement period, and
- is anticipated to be 2 years.

13.4 STAGE 4 – LAND SALES

Scope & Timeline

This stage of the project is anticipated to consist of:

- Land sales, and
- is anticipated to be 9 months.

13.5 STAGE 5 - RESIDENTIAL DEVELOPMENT

Scope & Timeline

This stage of the project is anticipated to consist of:

- Construction of houses by PRB, or
- By individual lot owners, and
- is anticipated to be 2 years.

13.6 PROJECT PROGRAM

The project is anticipated to be carried out over a 3 year period with the following progress completion stages.

Activity	'25	2026				2027				2028				'29
Feasibility & Funding														
Subdivision & Permit														
Reclamation & Civil Works														
Land Sales														
Residential Development														

14.0 BUDGET FORECAST

The budget forecast is pending preparation of the detailed cost plan. This will include estimates for site reclamation, infrastructure installation (roads, drainage, power, water), subdivision survey and approvals, construction of house and land packages, and ongoing estate management costs. A comprehensive cost benefit analysis will be undertaken to confirm the financial viability of the preferred subdivision option and associated development stages

15.0 PRELIMINARY RECOMMENDATION

The preliminary recommendation section is pending completion of the feasibility report with final information. When complete the report will summarize the preferred subdivision option, key infrastructure and geotechnical recommendations, and highlight the need for further environmental impact assessment and consultation with relevant authorities. This section will underpin the project delivery strategy and funding considerations for the next phases.

ENABLING WORKS

To assist in the general project implementations and completion of the feasibility report the following enabling works are recommended:

- Civil Works
- Environmental & Traffic Impact Assessment
- Peripheral Survey.

See attachments for the respective Terms of Reference.

16.0 ATTACHMENTS

1. COPY OF TITLE
2. SUBDIVISION SKETCHES
    - Option: 800 sqm Lot Subdivision
    - Option: 400 sqm Lot Subdivision
3. GEOTECHICAL ADVICE
    - Geotechnical Report
    - Supplementary advice letter.
4. CIVIL WORKS (SITE PREPARATION) - TOR
5. EVIRONMENTAL & TRAFFIC IMPACT ASSESSMENT - TOR
6. PERIPHERAL SURVEY (SUBDIVISION) – TOR