



Farm design and specifics V9
JULY 20, 2025

ORDER OF PRIORITIES

1

Water

For crops & livestock

2

Chicken Coup

For eggs

To utilise fallen fruit and manage fruit fly

To create a source of fertiliser

3

Cow Fencing

To protect crops from rouge cattle

To pen a cow in areas that require clearing

4

Pig Pen

To hold pigs in set locations

To till the soil

5

Animal Shelter

To help keep animals healthy in the rainy season

6

Purchase and Home Animals

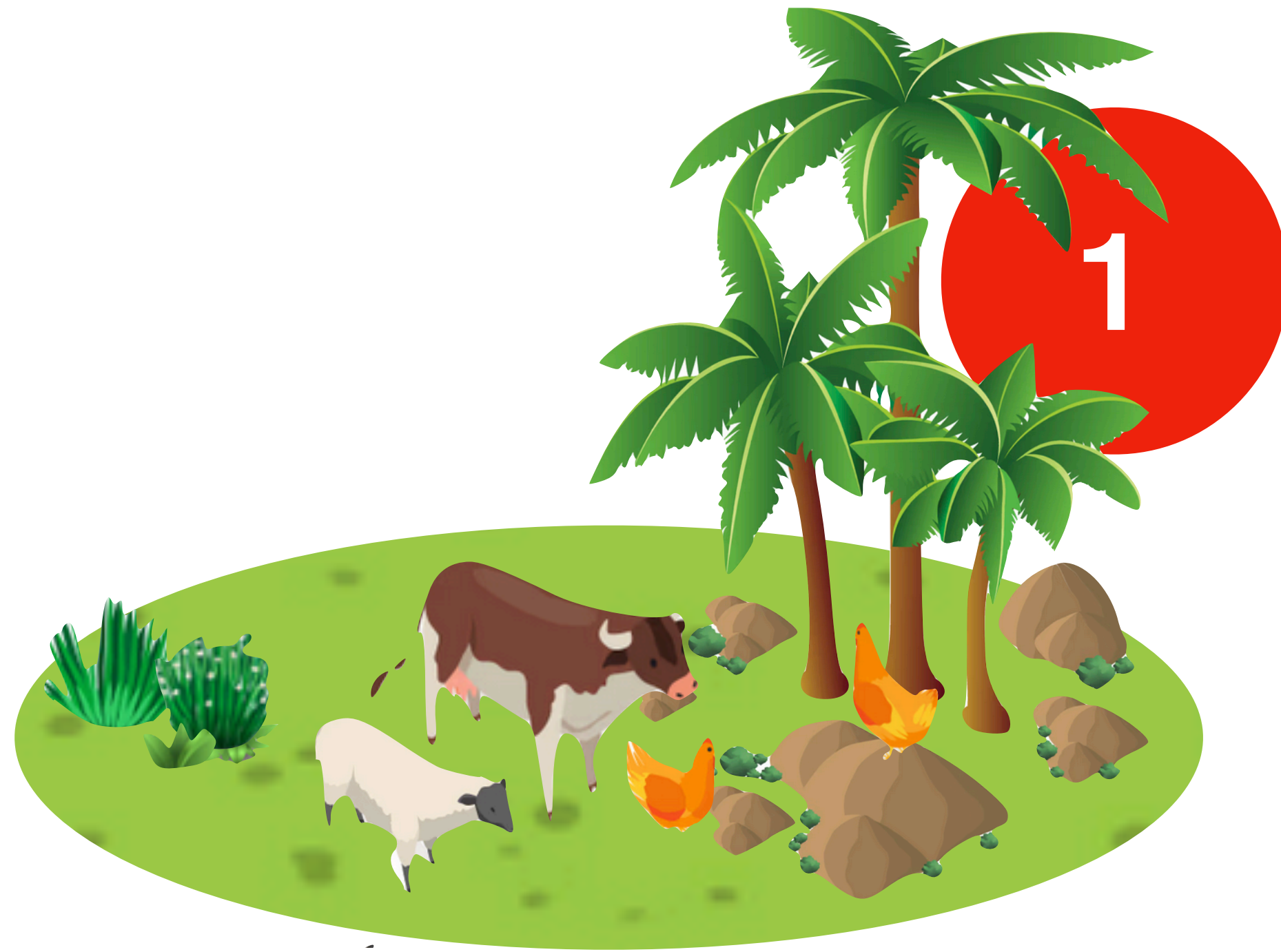
Bring new animals to the YWAM Base





FARM DESIGN





Water

For crops & livestock

TASKS / SCOPE OF WORK

Clean Water Tank

Dig Pipes into the Ground

Fix the Pipework

Install Troughs





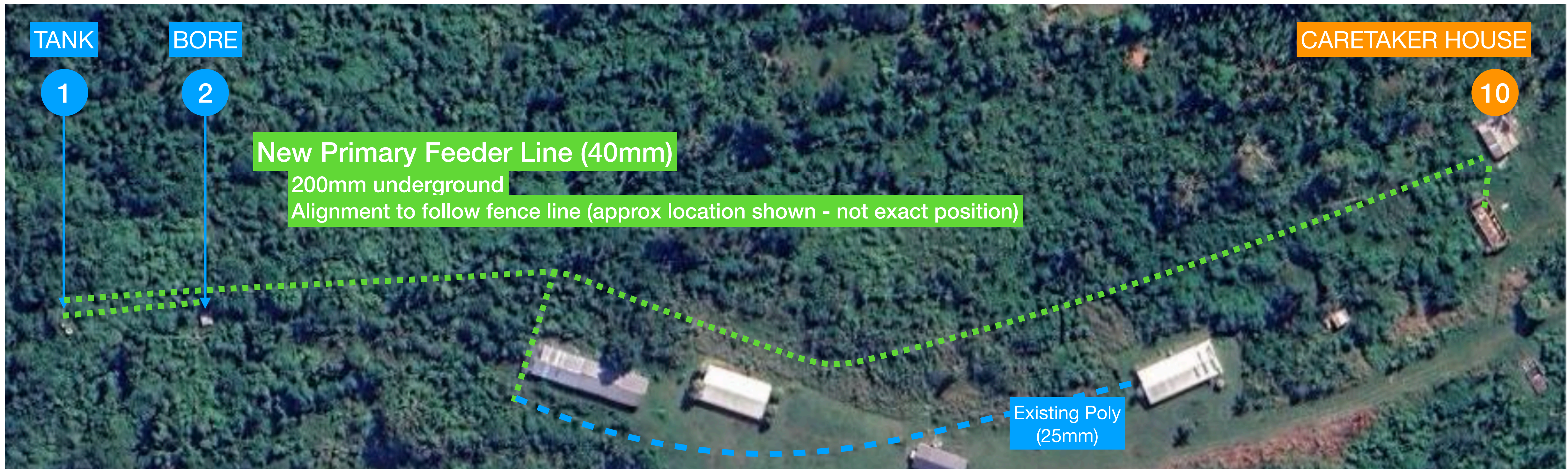
STAGE ONE - Clean and Re-Plumb the Existing Tanks

Up turn and remove all leaf litter and mud from bottom of tanks

STAGE TWO- Remove and retrieve existing overland 32mm poly

Retrieving the existing poly and fittings for re-use.

Ensure the existing poly isn't further damaged by the trencher or future work.



STAGE THREE - Installation of Main Line and Branches

600m of 40mm green-stripe poly
Clearing pipeline (ideally to follow a fence line)
200mm deep trench (requires trencher and saws for tree-roots)



STAGE FOUR - Connect Mainline into Tanks

Empty and clean the tanks
 Connect the Main Line into the Tank
 Connect the bore line into the Tank
 Ensure both tanks are daisy chained
 Seal the tank (install a lid)

Pipe-Work Diagrams

Tank Configuration

BORE INTO TANK

REQUIRED FITTINGS

BORE LINE INTO TANK

40mm Philmac Elbow

Big Buddy Float Valve

40mm Philmac Tank Connector Female Inlet BSP Poly
(if not using the float valve)

40mm Female EndCon Elbow

Flyscreen Lid for Tank



1-1/2"
40mm



40mm

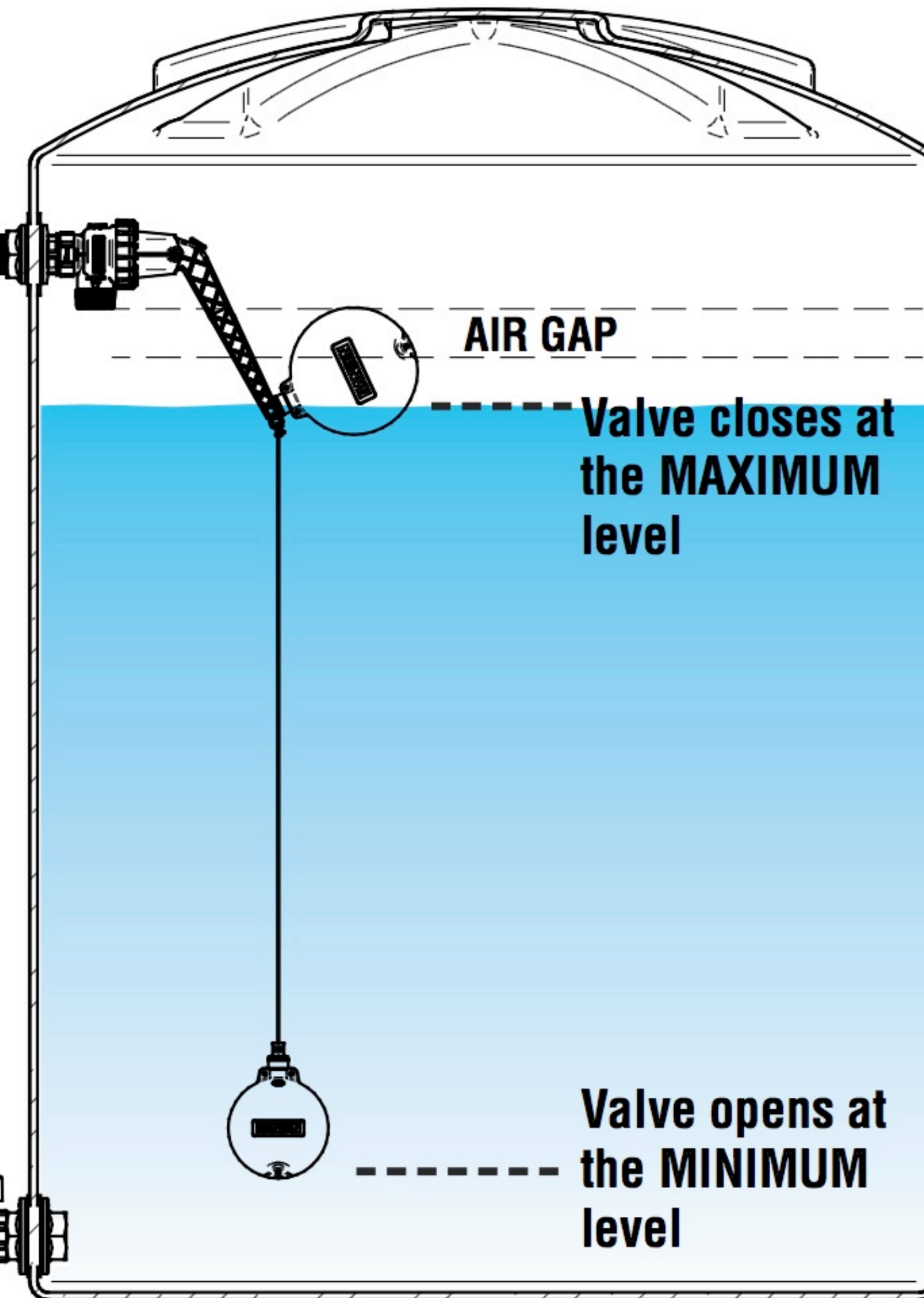


1-1/2"
40mm

Ball
Valve
Outlet

Leveller
Valve
Inlet

1-1/2"
40mm



Visible
Overflow
Discharge

AIR GAP

Valve closes at
the MAXIMUM
level

Valve opens at
the MINIMUM
level

Pipe-Work Diagrams

Tank Configuration

TANK to MAIN LINE

REQUIRED FITTINGS

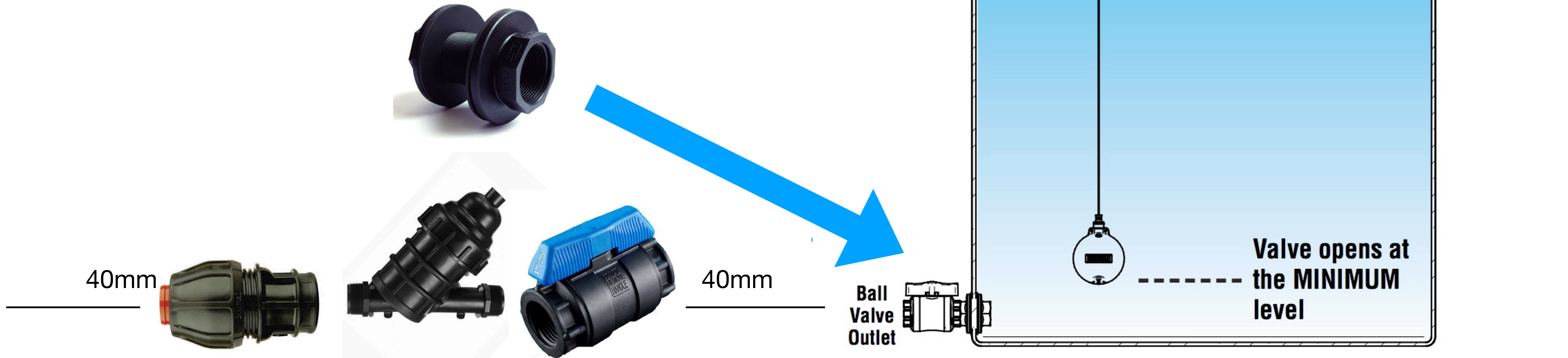
TANK TO MAINLINE:

40mm Philmac Tank Connector Female Inlet BSP Poly

40mm Ball Valve Male / Female

40mm Female EndCon Elbow

40mm (1-1/2") disk filter



Purchase additional washers and nipple fittings for redundancy

Pipe-Work Diagrams

Tank Configuration

TANK to MAIN LINE

REQUIRED FITTINGS

TANK TO TANK:

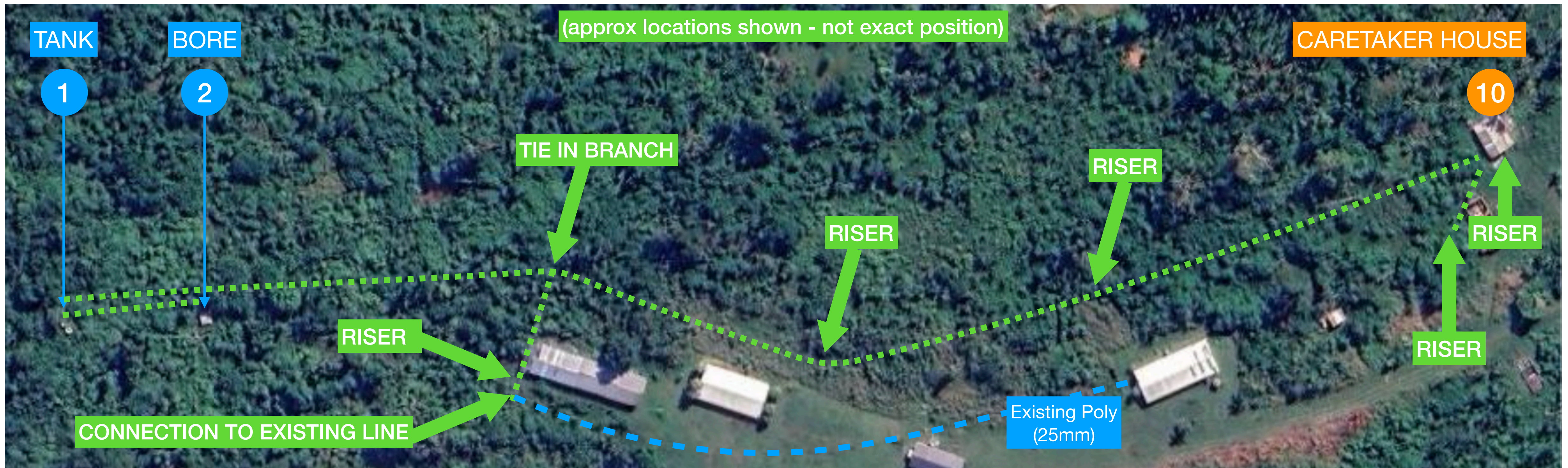
2 X 40mm Tank Outlet Female

2 X 40mm Ball Valve Male / Female

2 X 40mm EndCon Female



Purchase additional washers and nipple fittings for redundancy



STAGE FIVE - Installation of Tee Junctions to Branches and Risers

Reducing Washer



Pipe-Work Diagrams

5 X Risers

REQUIRED FITTINGS

5 X Joiner Rural TEE 40MM with 32MM Female Tee
(*optional reduction washer if 40mm tee to 40mm branch*)

5 X 32mm Male EndCon

Recycled 32mm branch poly

5 X 32mm Poly End-Con Male (90degree elbow ideal)

5 X 32mm Ball Valve



32mm



32mm + Reducing Washer

1 X Tee Junction to Branch

REQUIRED FITTINGS

1 X Joiner Rural TEE 40MM with 32MM Female Tee
(*optional reduction washer if 40mm tee to 40mm branch*)

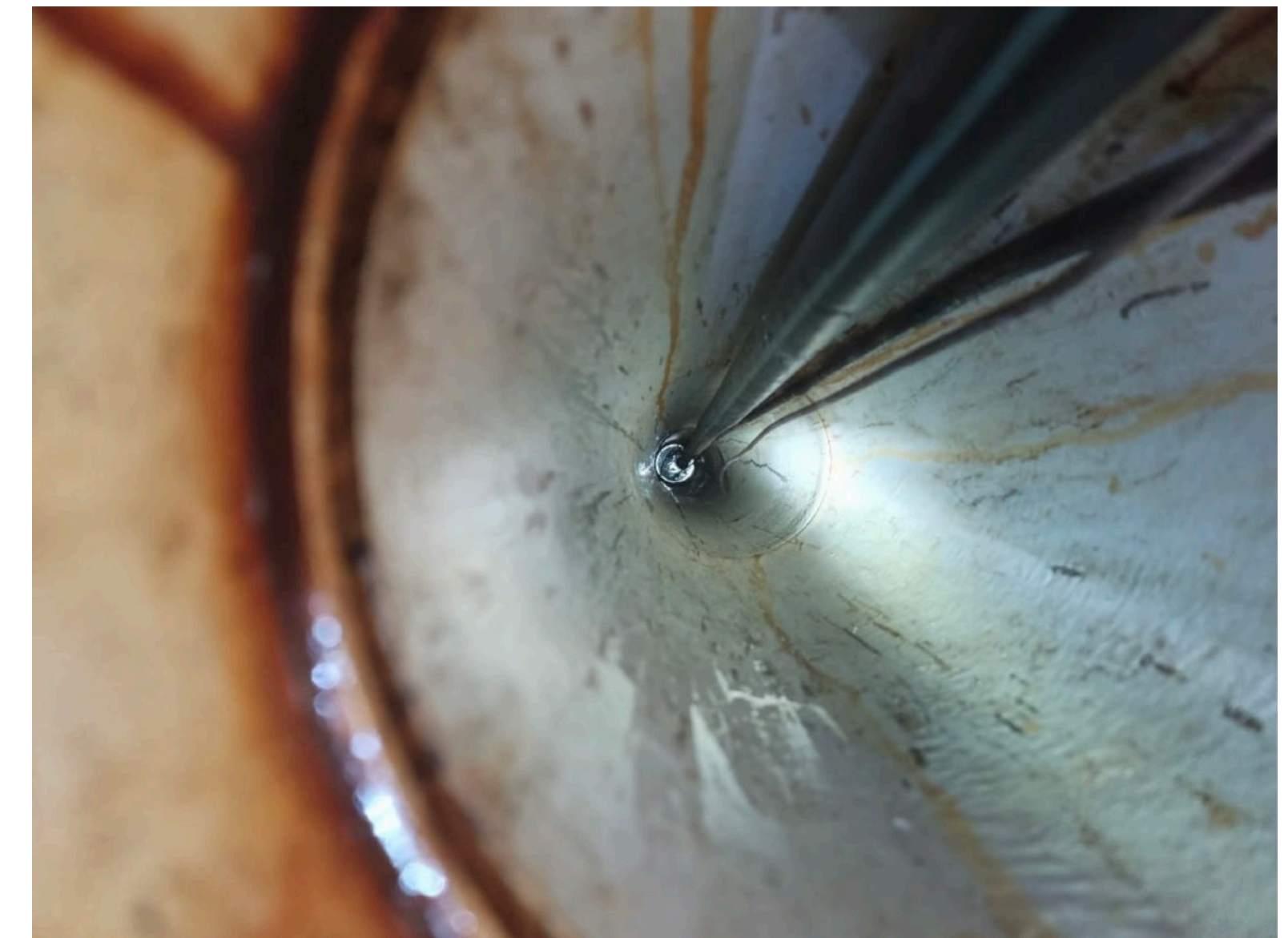
1 X 32mm Male EndCon

Recycled 32mm branch poly

40mm



40mm

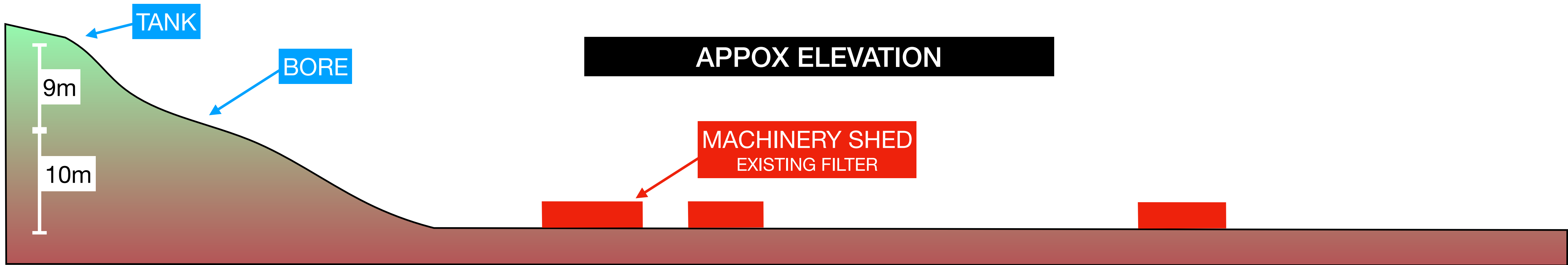
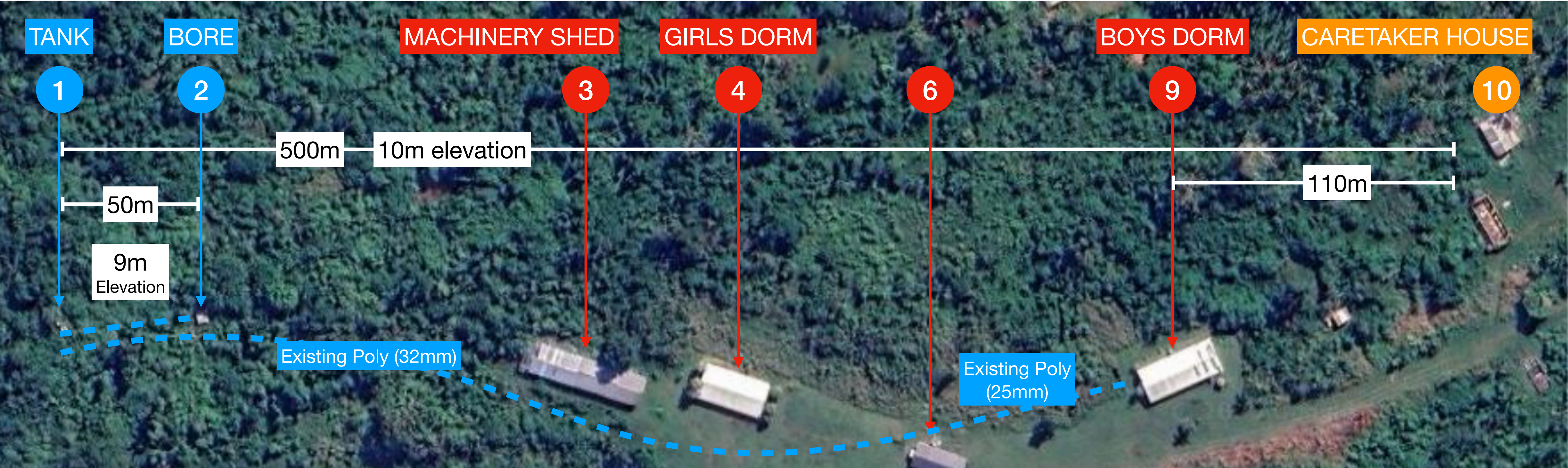


STAGE SIX - Replace Bore Pump with Solar Pump

Remove and clean existing pump
(keep it in place until new system confirmed as working)

Install new pump
Install new solar panels and array
Install new control box
Pump into tanks

This photo shows the tanks up behind the shed





Chicken Coup

For eggs and meat

TASKS / SCOPE OF WORK

Assess the need and come up with a design

Make it dog proof

Make it chook proof

Make it hurricane proof



JUST SOME IDEAS



JUST SOME IDEAS



THEY STORE CHICKS





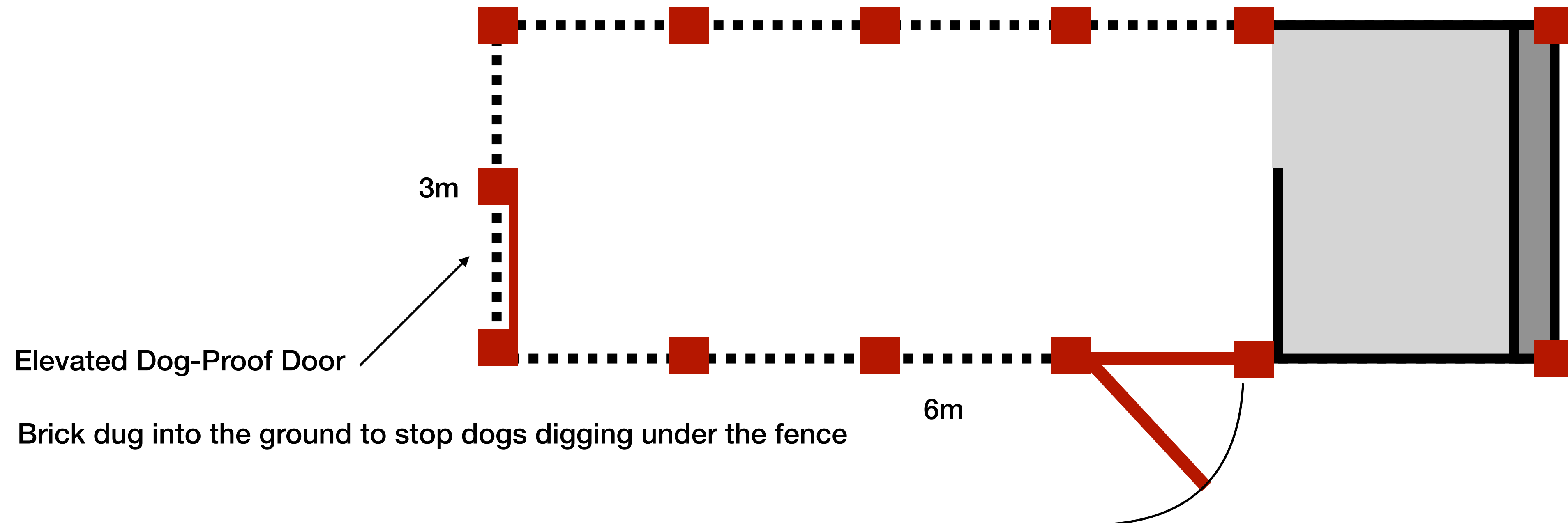
REQUIRED MATERIALS

Chicken Netting 50m Roll (2m X 20m)
Metal Strapping (non-structural)
Clouts (1000pc)
Phillips Head Screws (1000) (45mm outdoor galvanised)
Buggle Screws (500) (75mm outdoor galvanised)
Hinges X 3 (Access Door)
Hinges X 6 (Laying Boxes)

Brace Ply (H2)
Bricks

Assuming all other timber and materials can be sourced from on base

Chicken Feed 4X 20kg Bag Pellets
2 X 44Gallon Drum





Cow Fencing

Keep the rotten neighbours cows out...
Keep their own cow in!

TASKS / SCOPE OF WORK

Assess the need and finalise up with a layout

Clear Fence Lines

Install corner posts, strainers and gates

String wire

Install Electric Netting

Make it cow and hurricane proof





Requirements for Plot Fencing

- 4 X Star Pickets (for corners of plot to tension netting)
- Electric Netting
- Fence Energizer

Requirements for Boundary Permanent Fence

- 200 X Star Pickets
- High Tensile Wire
- 5 X Strainer Posts
- Insulators X 200
- End Insulators X 12

*Gate (for Base Entrance?), Gate Fittings and Latch?

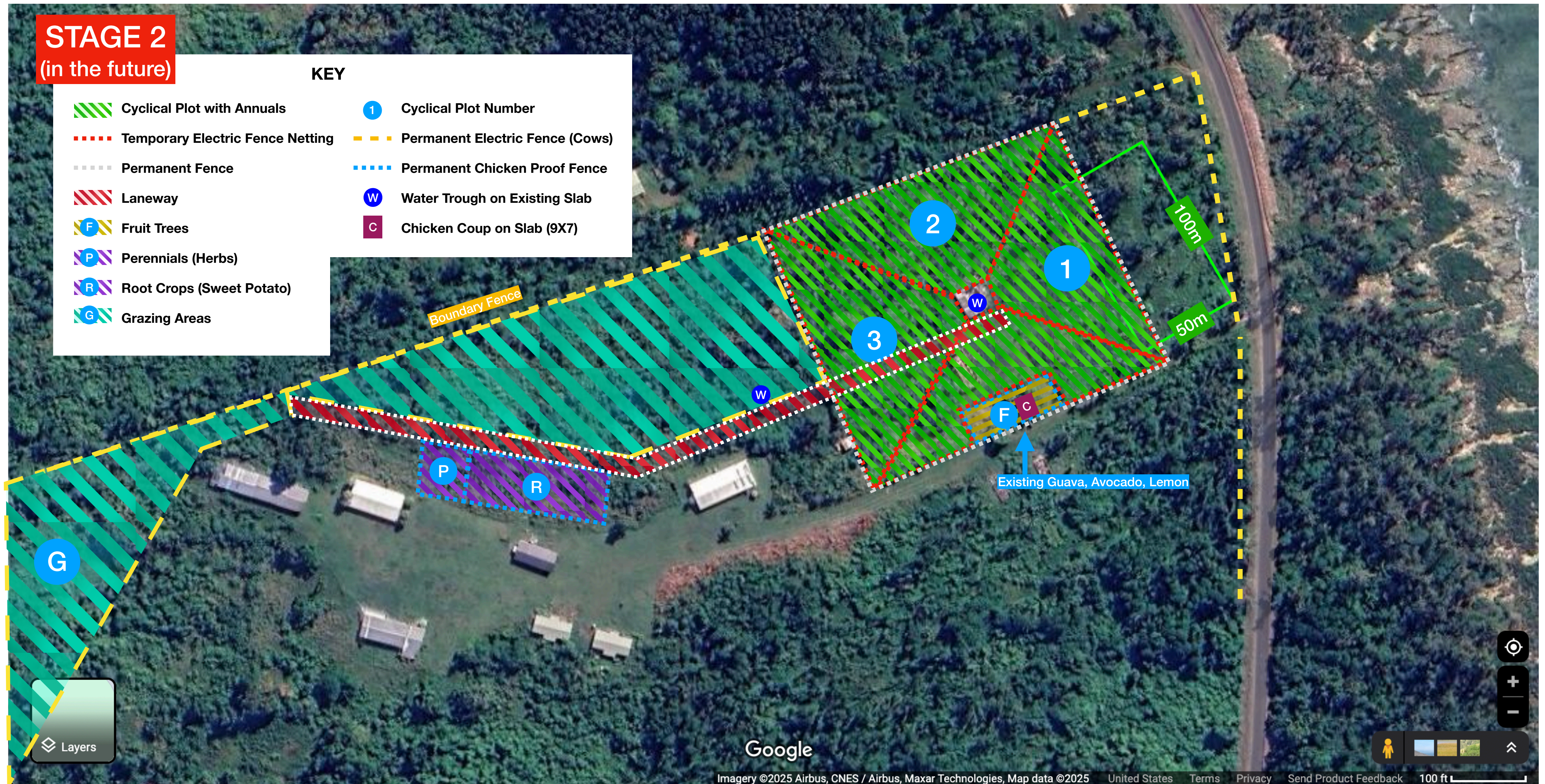
4km - Fencing Barbed Wire High Tensile 1.80mm and 1.57mm wire



STAGE 2
(in the future)

KEY

- | | |
|--|---|
|  Cyclical Plot with Annuals |  Cyclical Plot Number |
|  Temporary Electric Fence Netting |  Permanent Electric Fence (Cows) |
|  Permanent Fence |  Permanent Chicken Proof Fence |
|  Laneway |  Water Trough on Existing Slab |
|  Fruit Trees |  Chicken Coup on Slab (9X7) |
|  Perennials (Herbs) | |
|  Root Crops (Sweet Potato) | |
|  Grazing Areas | |





Pig Pen

To hold pigs in set locations
To till the soil

TASKS / SCOPE OF WORK

Build the pen

Build a mobile shelter

Build a mobile water supply

Pig Pen

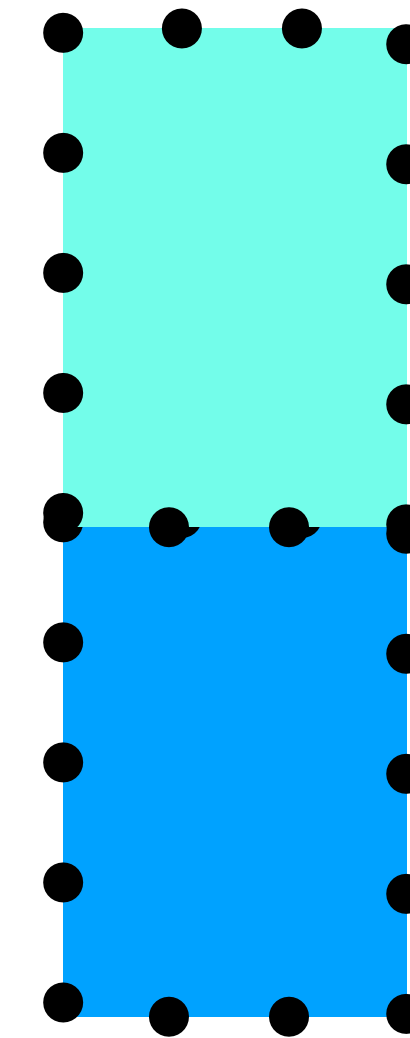


**GREAT DESIGN -
THANKS JONATHAN LEE!**



Two pens.
Leap Frog Around Paddock.
Only remain in pen position long enough to tear everything up, then move the pen.

Shelter and water needs to be able to be easily moved about.





REQUIRED MATERIALS

Rio Mesh (or Weld Mesh)

- *3mm thick*
- *30m X 900mm high*

Star Pickets X 30

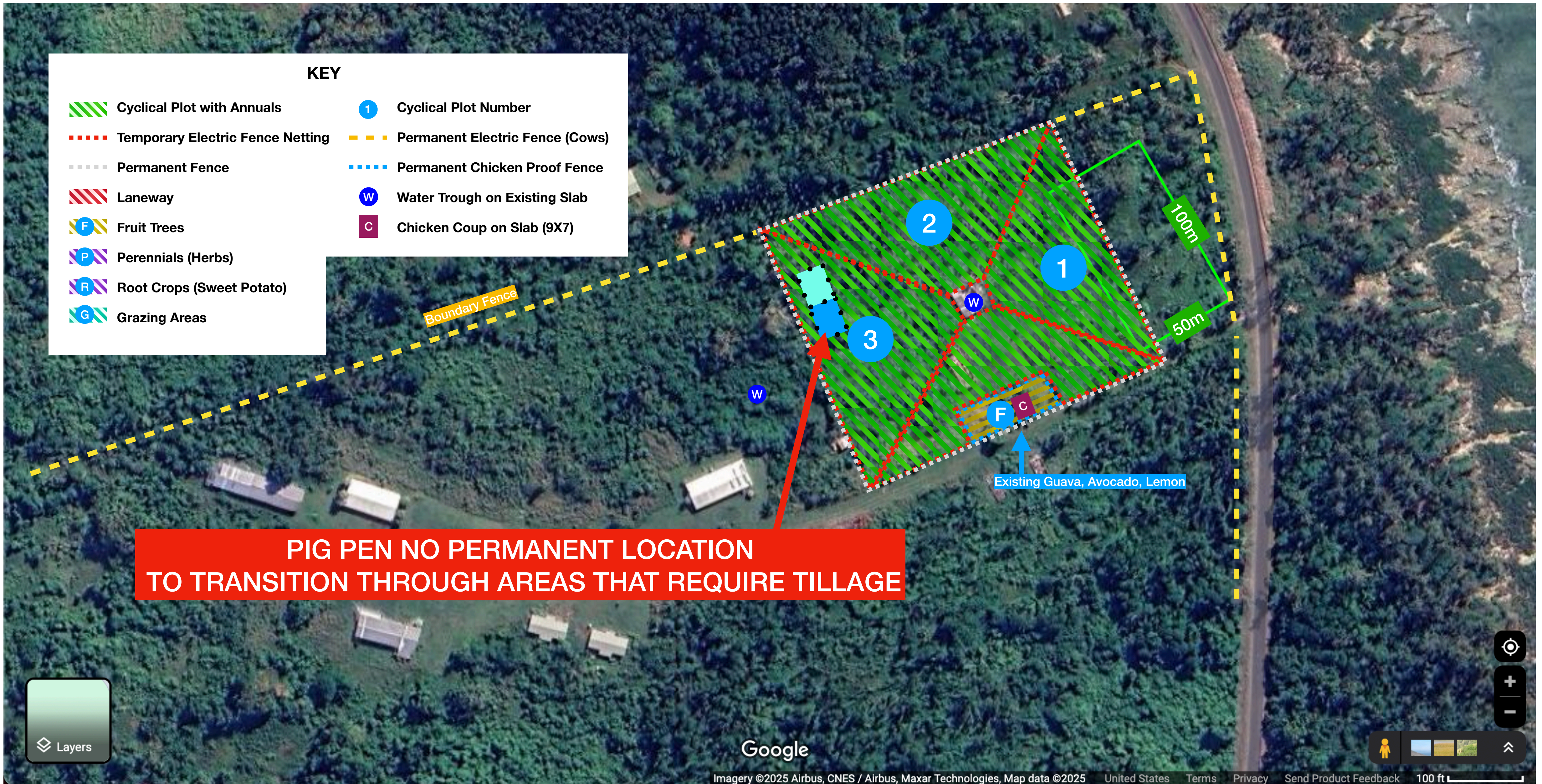
Wire

- *Low tensile, easy twist, 3mm thick*

Water Trough (relocatable)

- Robust with protected water fittings

Assumed all other materials for shelter available on base.





Animal Shelter

For Animal Health during the Monsoon

TASKS / SCOPE OF WORK

Assess the need, and come up with a workable plan

Clear the worksite

Build walls and roof



THIS IS THE BUILDING TO BE TURNED INTO AN ANIMAL SHELTER



REQUIRED MATERIALS

Metal Strapping (structural)

Metal Strapping Tensioners

Clouts (2000pc)

Phillips Head Screws (5000) (45mm outdoor galvanised)

Bugle Screws (1500) (75mm outdoor galvanised)

Brace Ply (H2)

Assuming all other timber and materials can be sourced (reclaimed) from base

FUTURE



