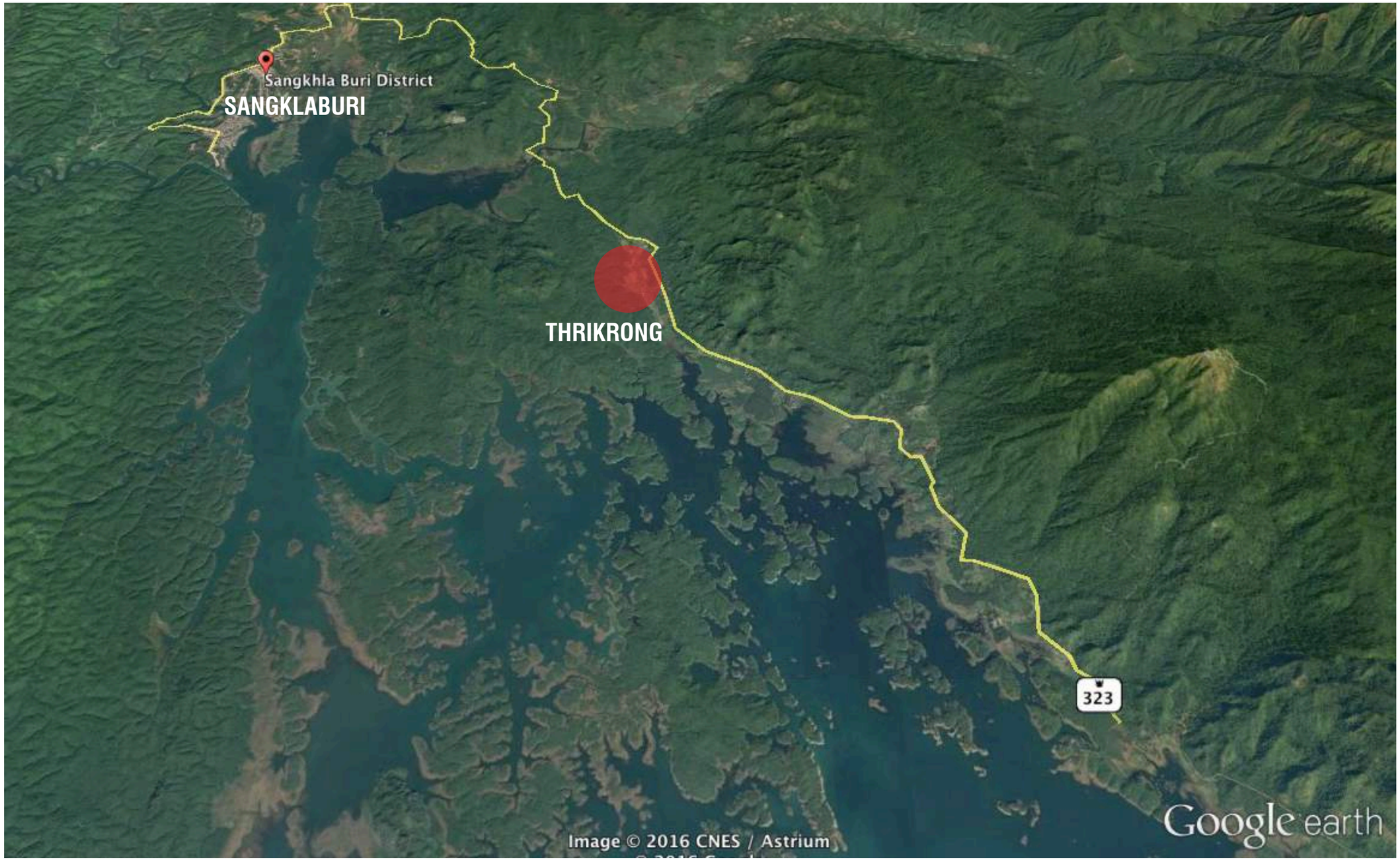
THIKRONG

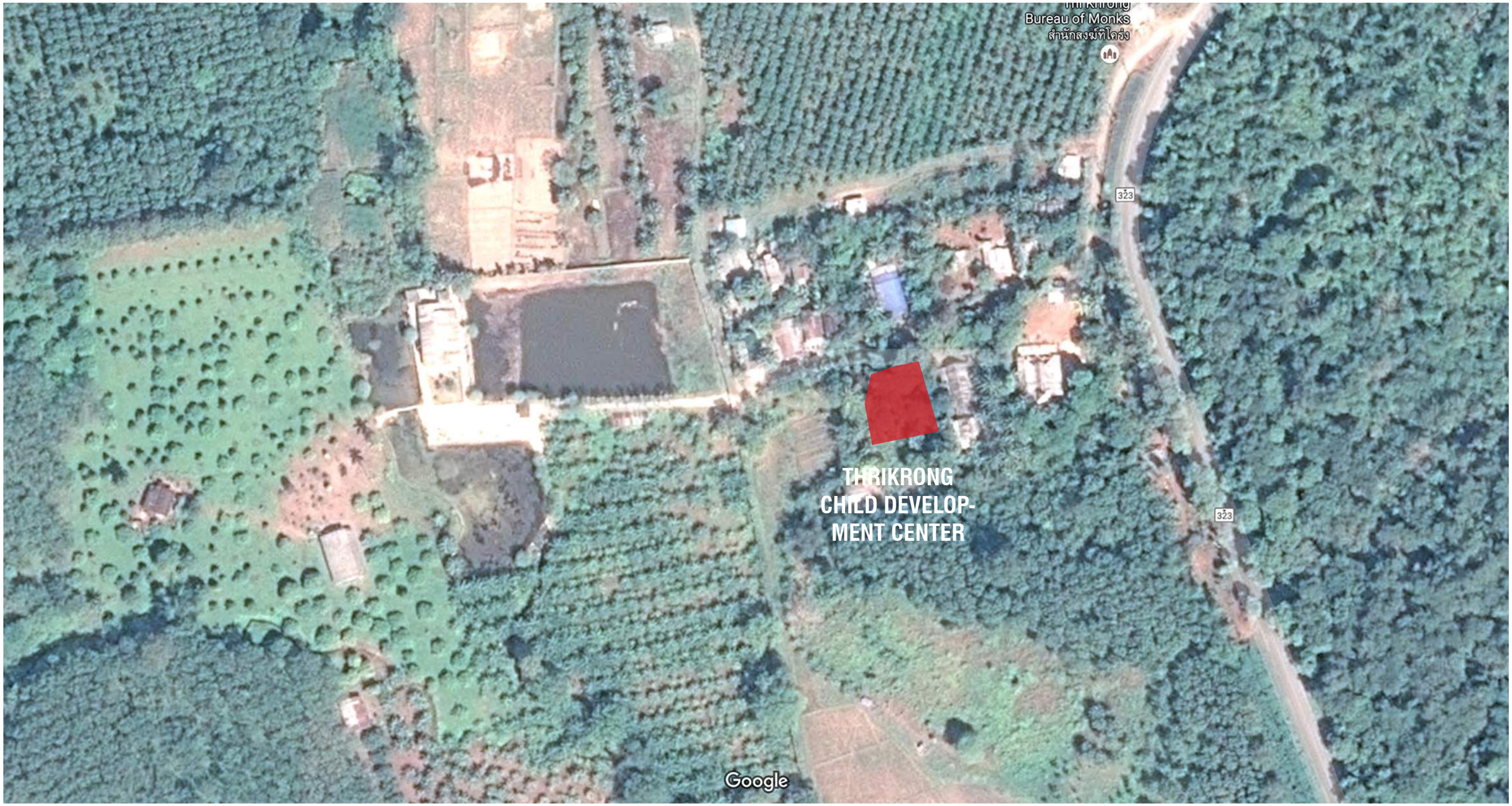
Child Develpment Center
Sangkhlaburi Distrit

ESTUDIO CAVERNAS

LOCATION
Sangkhlaburi Distrit



LOCATION
Sangkhlaburi Distrit



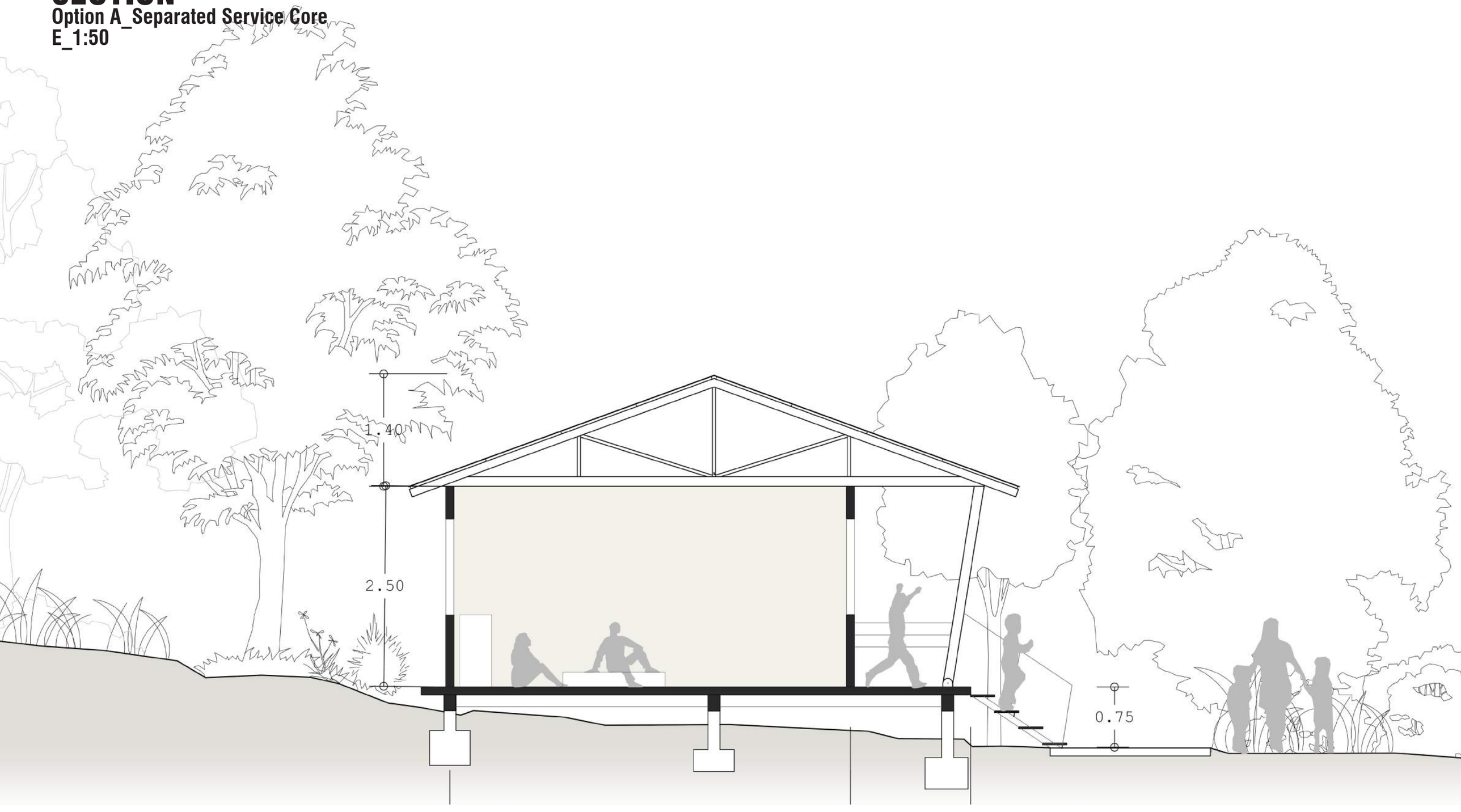
SITE PLAN 1:500

Sangkhlaburi Distrit

SITE PLAN 1:500

Sangkhlaburi Distrit

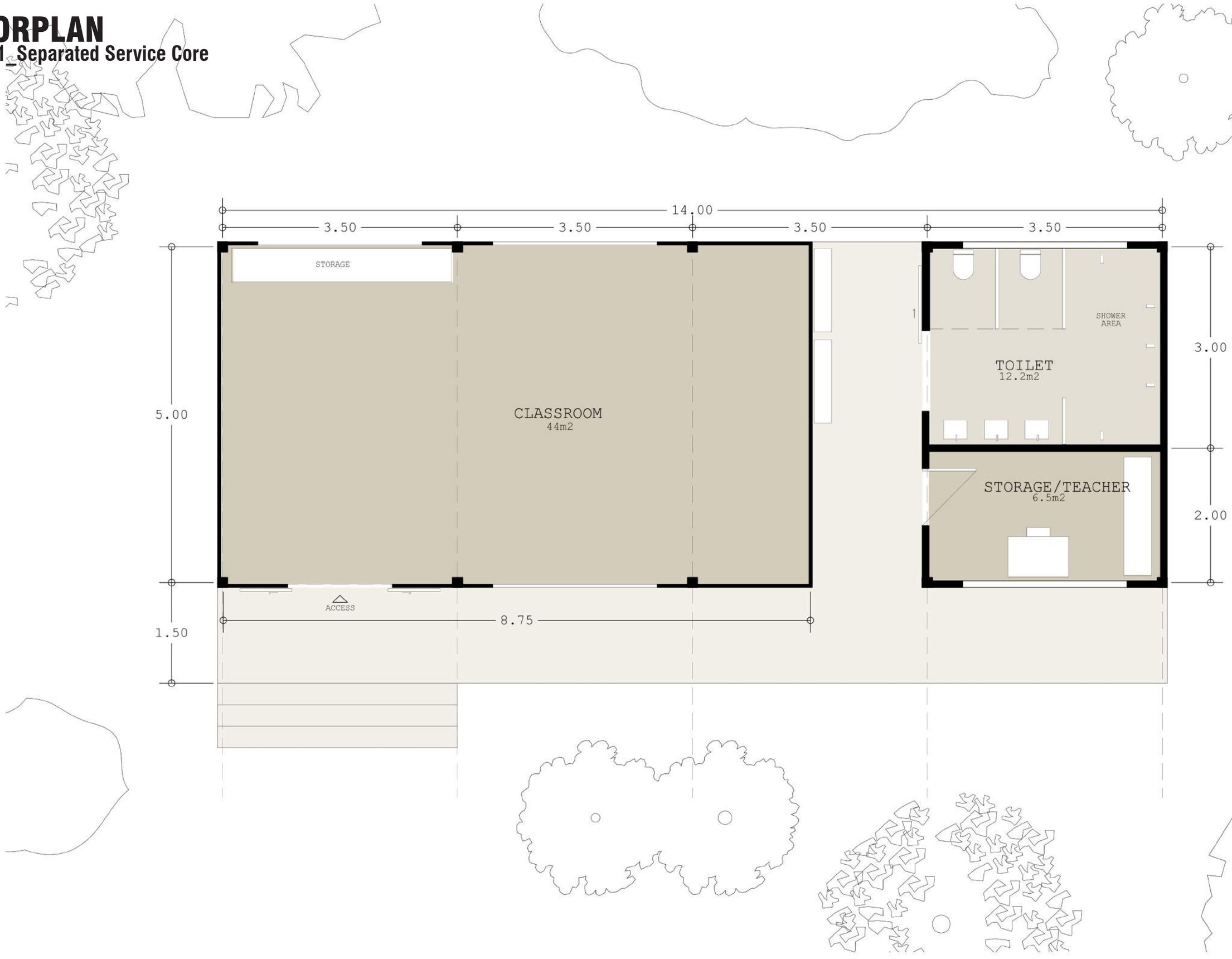
SECTION
Option A_Separated Service Core
E_1:50



FLOORPLAN

Option 1_Separated Service Core

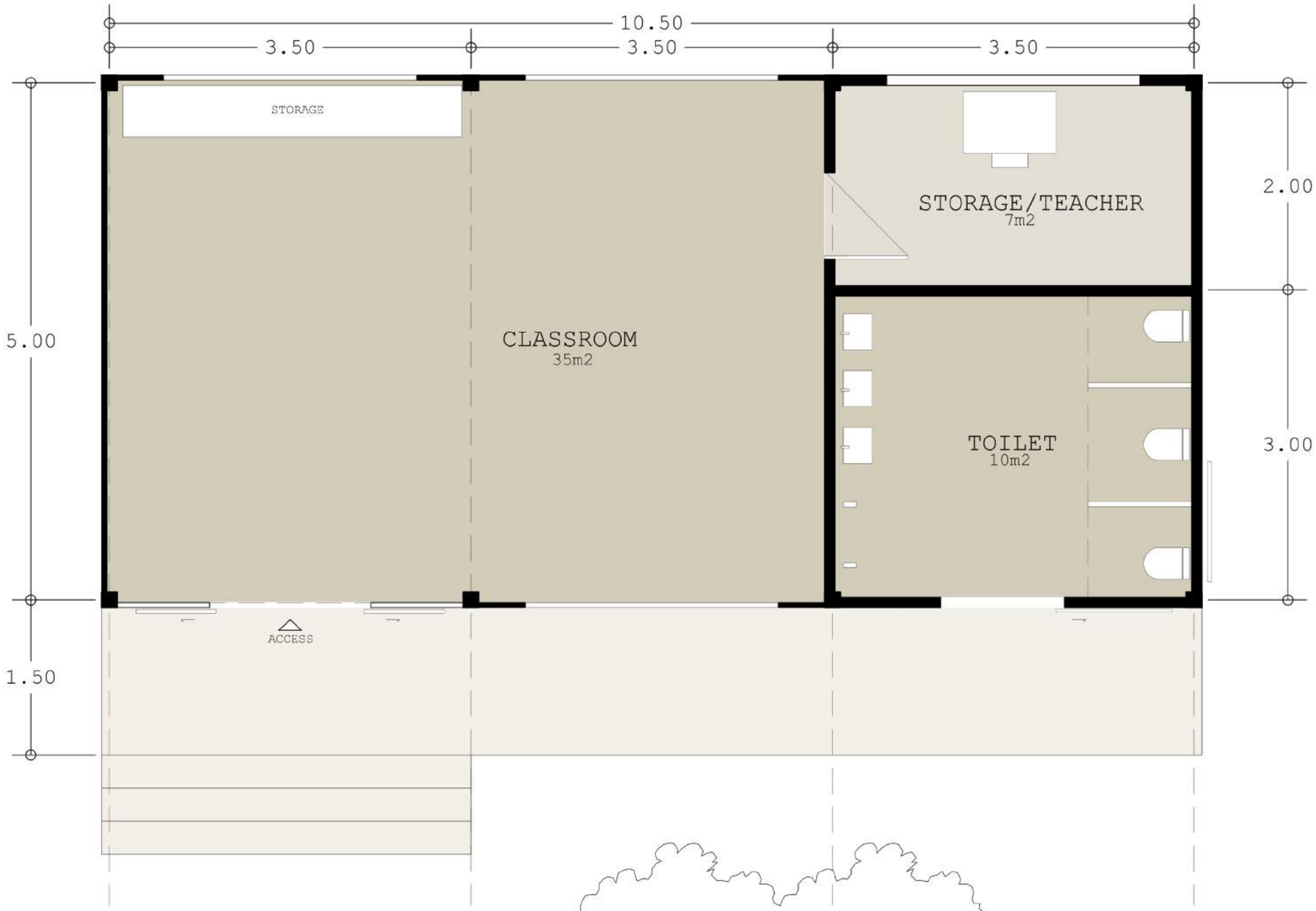
E_1:50



FLOORPLAN

Option 2_Incorporated Core

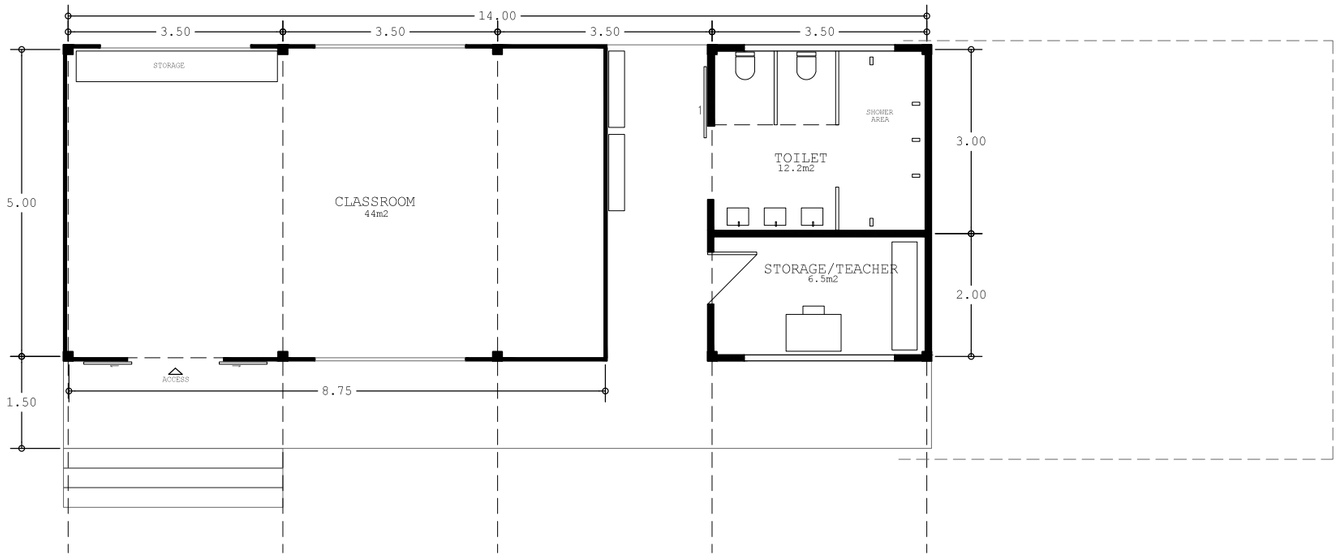
E_1:50

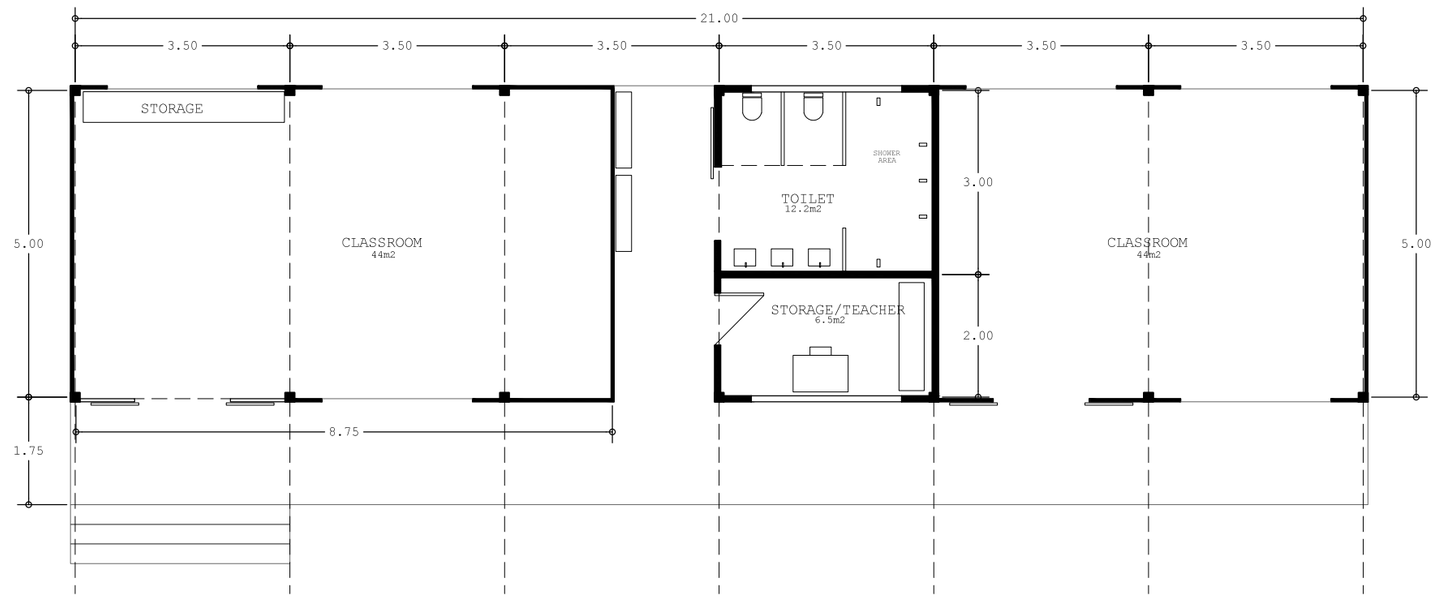


POTENTIAL EXPANSION

Option 1_Separated Service Core

If there is a future expansion, on this option all the elements stay as they are. The floor slab will be built on the side and the classroom added without altering the current circulation of the Center

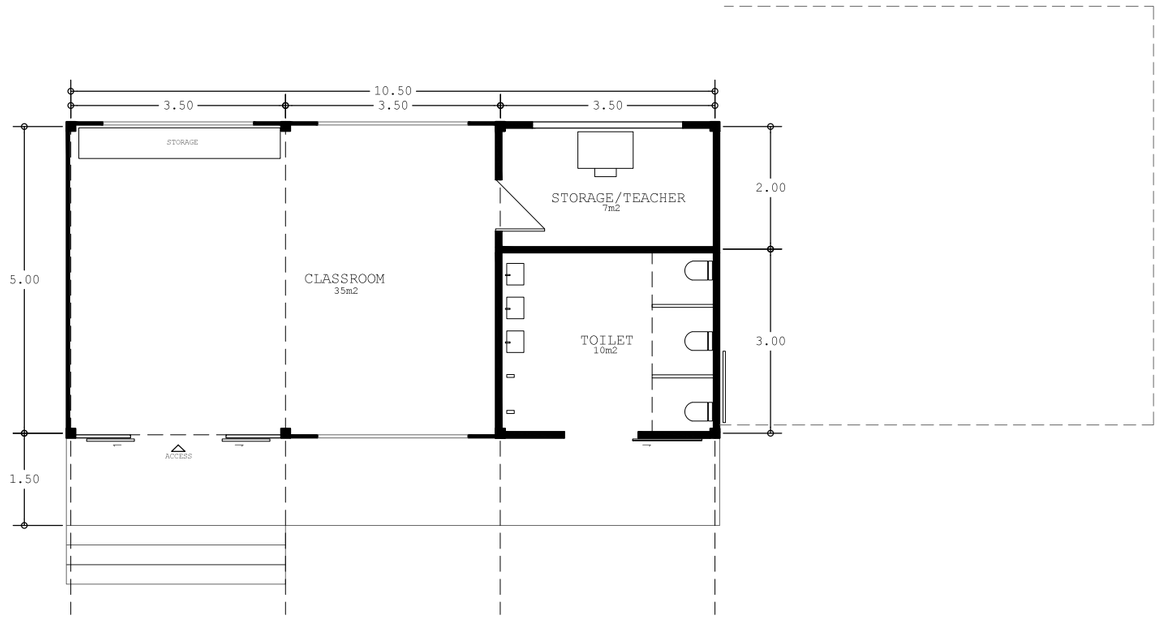


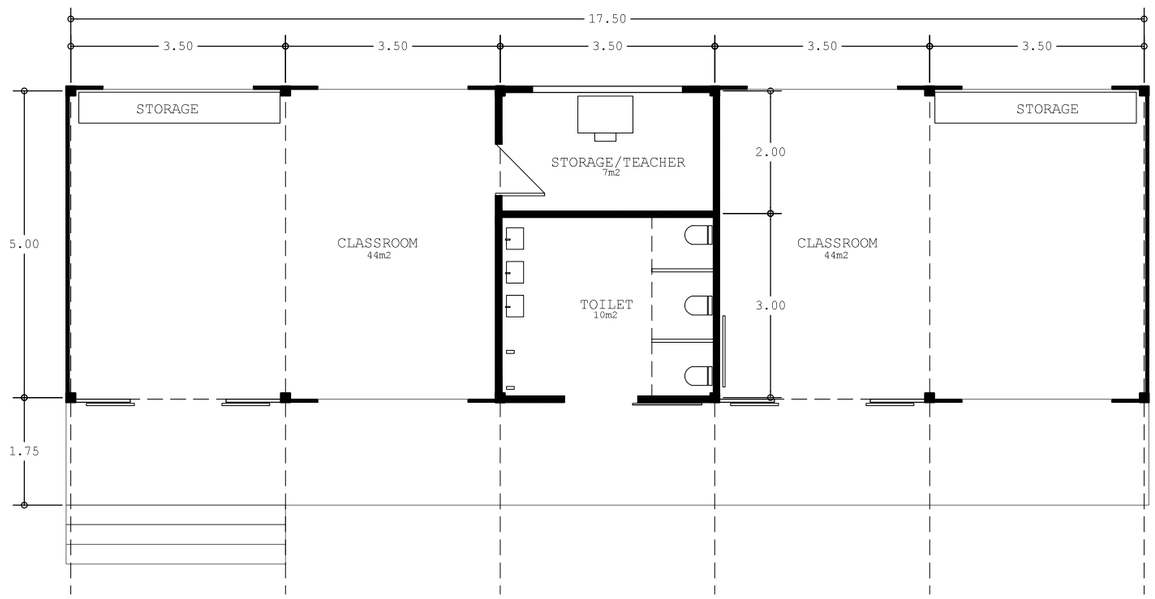


POTENTIAL EXPANSION

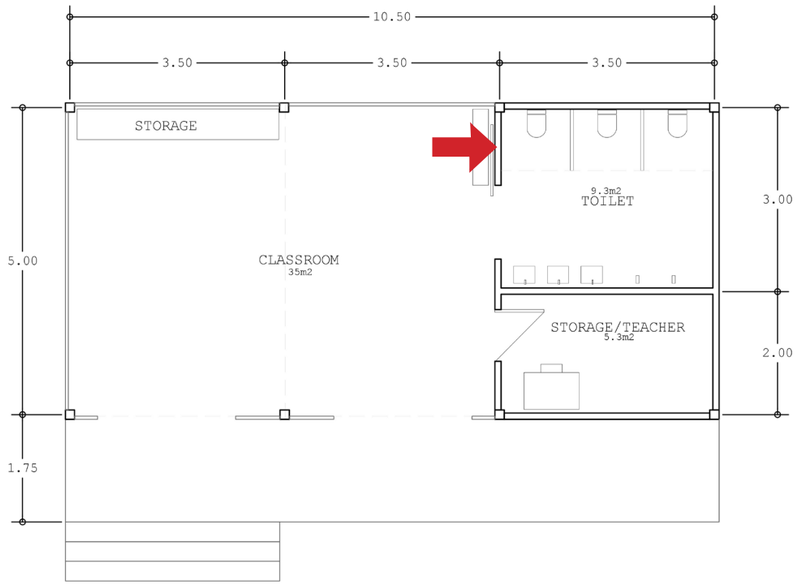
Option 2_Incorporated Core

If there is a future expansion, on this option the toilet needs to be modified, having two possible solutions.
a_Shift the toilet to the front, access through the front
b_Opening an acces from Classroom II, loosing this way some of the usable area.



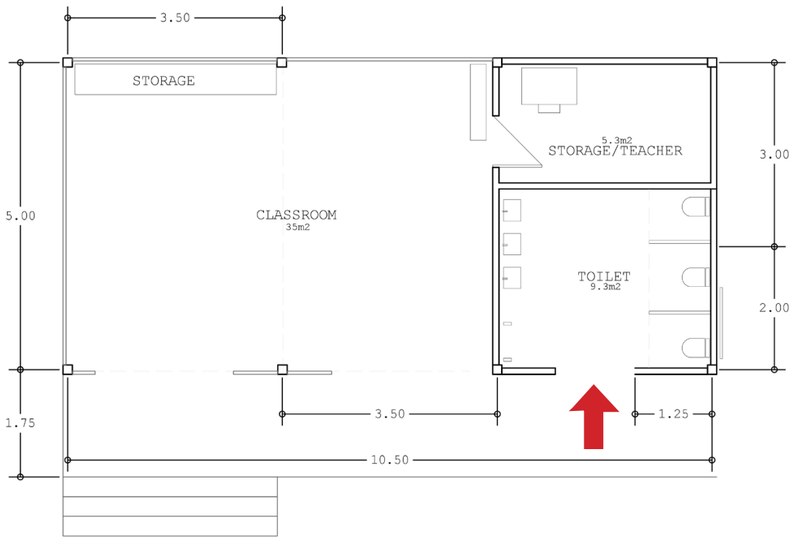


TOILET ACCESS STUDIES



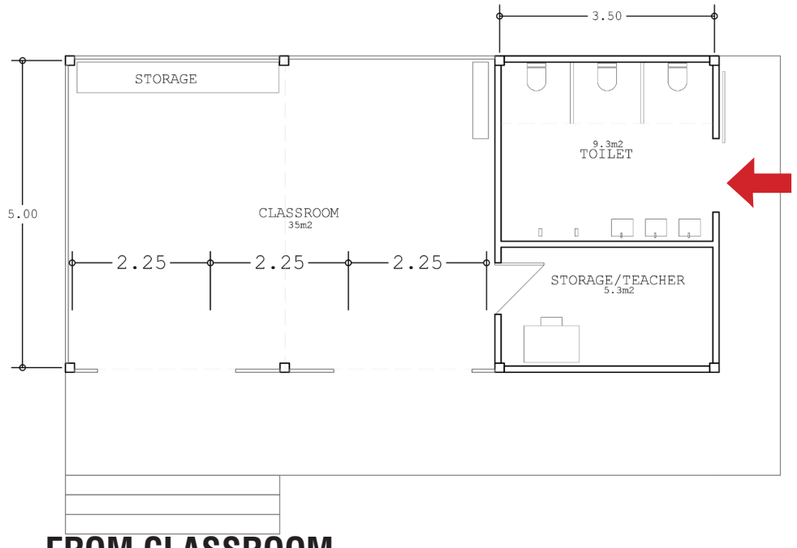
FROM CLASSROOM

PROS Saves space
CONS Direct contact with classroom (possible smell)
If there is an expansion, kids will have to walk thought the classroom



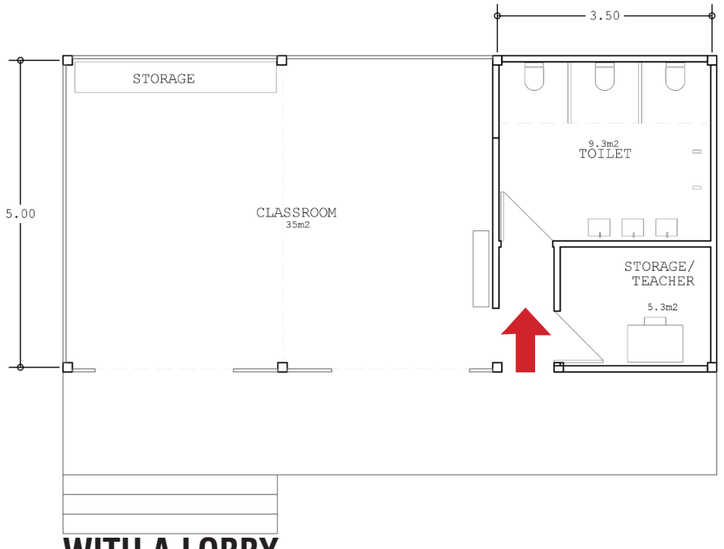
FROM CLASSROOM

PROS Easy access from outside
No smell
CONS Unpleasant to have a toilet opening on the front facade
Can see inside from many places



FROM CLASSROOM

PROS Easy access from outside
Cant see from the front
CONS Too far from the classroom
Bigger slab, less cost-efficient



WITH A LOBBY

PROS Avoid view from the front
CONS Less efficient
Teacher room and storage get smaller

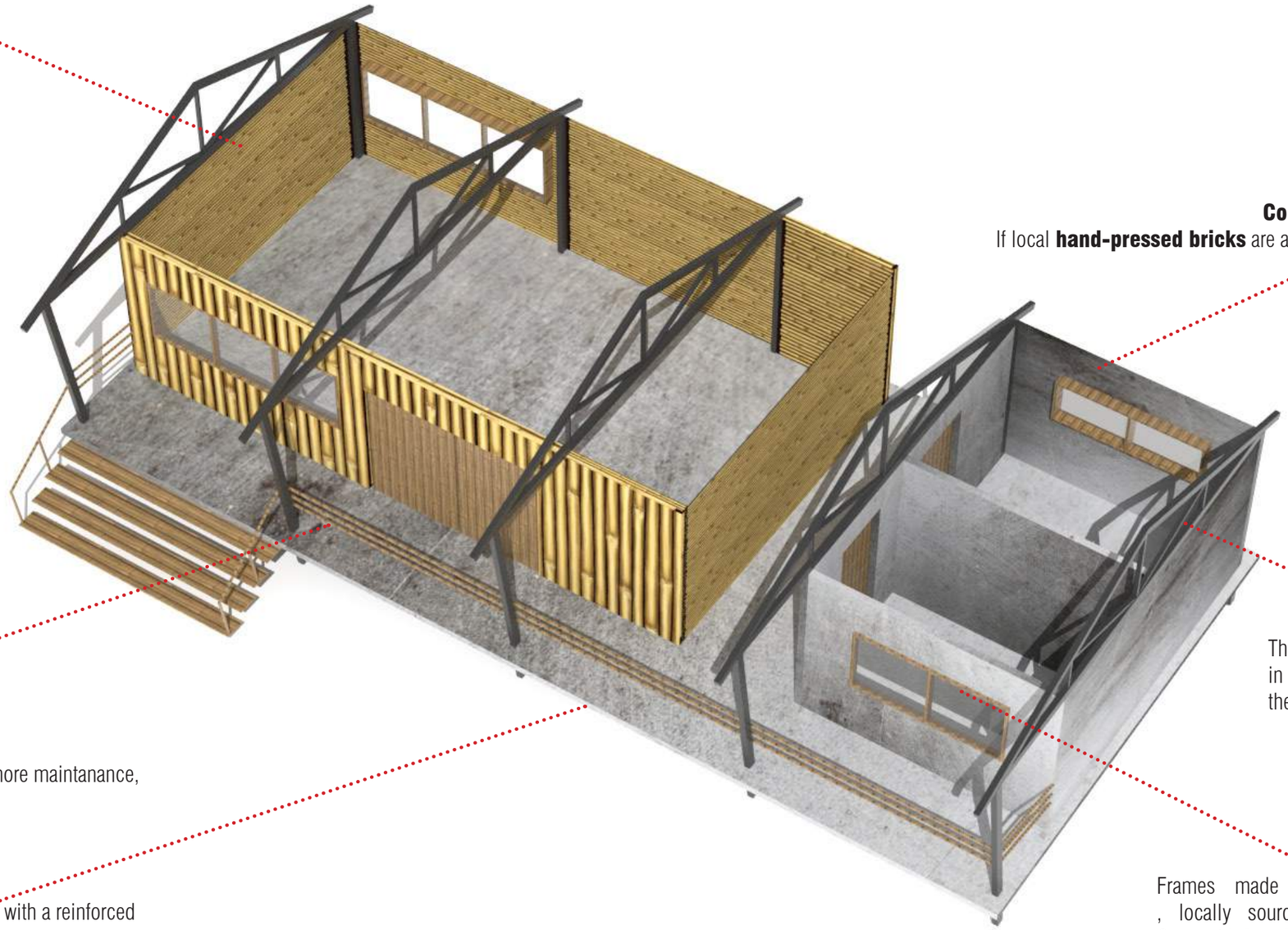
MATERIALS

ROOF

Thatch roof would be the most desirable solution, for sustainabily reasons. Understanding its a concern , roof tiles or metal roof sheets are the options at the moment. **Isolated metal roof sheets** improve the termic conditions of the building, the decission will be based on the budget

STRUCTURE

Steel Profiles for both; Columns and truss beams.
Reinforced concrete is also an option.



SERVICE CORE: TOILET+STORAGE

Concrete Block ad concrete plastering.
If local **hand-pressed bricks** are available it can be an option to consider

ACCESS STAIRS +HANDRAILS

Hard wood locally sourced.
Bamboo is also an option, it requires more maintanance, but also reduces cost

TOP OPENINGS

The use of **moschito protection** mesh in the opening is recommended. While the air can still flow, instect protection is guaranteed.

FLOOR

Concrete Slab raised from the ground with a reinforced contrete structure and fundations.
Red wood floor with metal structure is also an option, the cost would be higher.

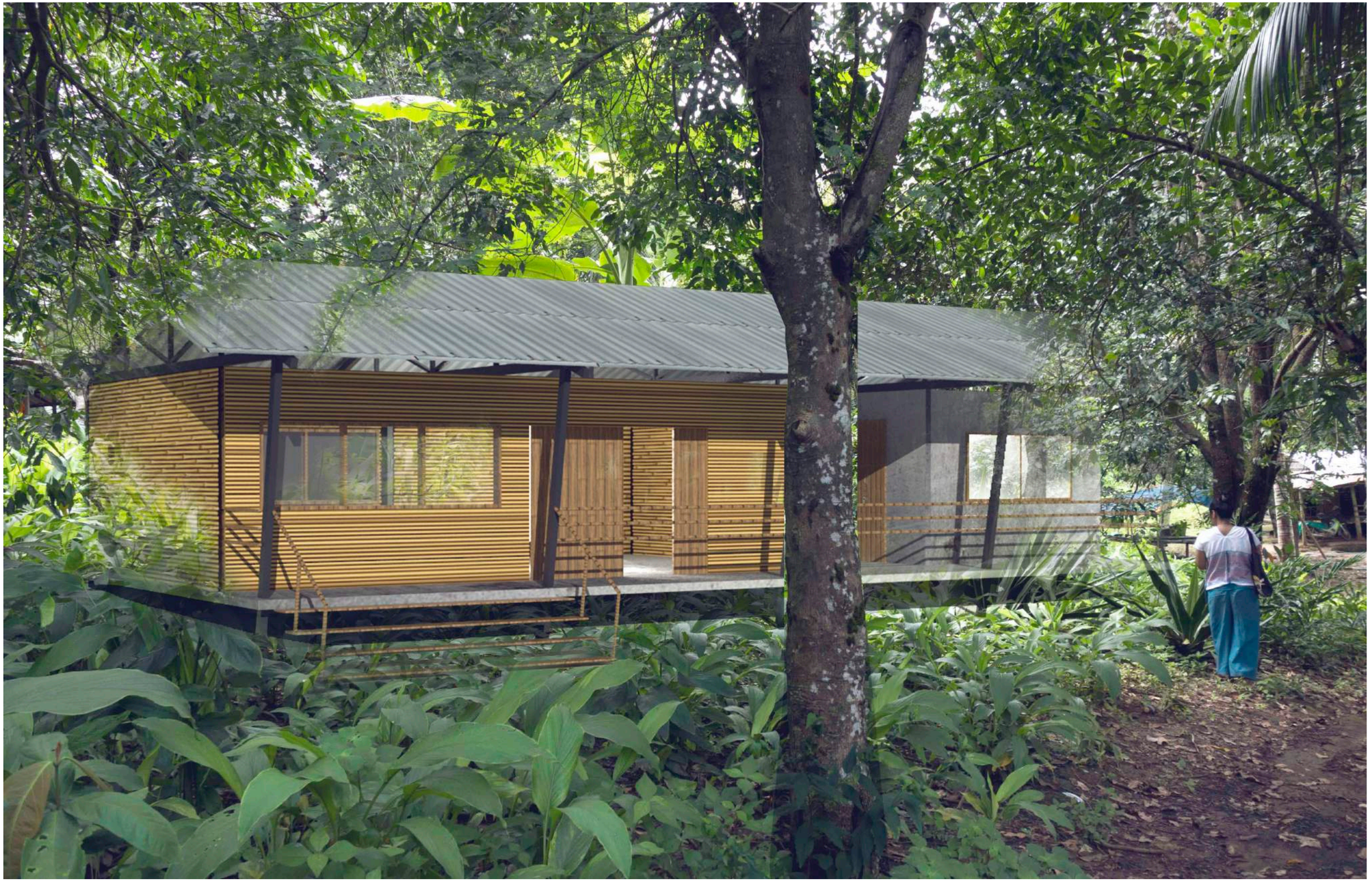
OPENINGS: WINDOWS

Frames made out of **hard wood/red wood** , locally sourced. Clear glass for the opening. Open with **bamboo** slats is also an option, depending on the budget

PERSPECTIVES

PERSPECTIVE_opt1
View from South (front)

PERSPECTIVE_opt1
View from East (front)



PERSPECTIVE_opt1

View from South- East (front)
View from North (back)

PERSPECTIVE_opt2
View from South (front)

PERSPECTIVE_opt2
View from East (front)

PERSPECTIVE_opt2

View from South- East (front)
View from North (back)

BUDGET SUMMARY

Please see attached PDF with a detailed budeget stimation

SUMMARY

Chapter 01_Foundations	53650
Chapter 02_Concrete Slab	48000
Chapter 03_Structure	37600
Chapter 04_Roof	18460
Chapter 05_Enclosures and facade	49040
Chapter 06_Entrance Stairs and handrail	13230
Chapter 07_Sanitary equipment and plumbing	19200
Chapter 08_Doors and windows	12600
Chapter 09_Painting	6700

TOTAL COST STIMATION	258,480.00

Note; The cost stimation for the labor has been done considering a daily salary of 300 Bhat per worker and an average of 7 workers on a daily basis. The number of working days is variable depending on the conditions.

Note2; The budget stimation focuses on Option 1. Since Option uses the same construction techniques, it would be an stimation of 10% cheaper.