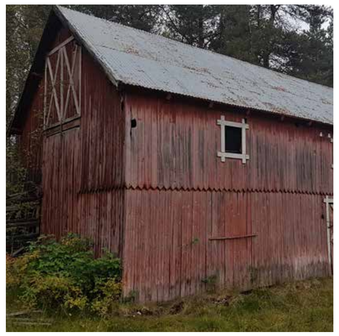
TWO BIRDS, ONE STONE

What is the potential that lies in abandoned agricultural building? Buildings that have lost their initial functionand use, and their need to transform to stay ”alive”. Keeping the notion of the cultural history while applying modern standards.



Critical areas

Before any transformation can be executed, the structure needs to be secure. After thorough examination the following critical areas were discovered:

1. The concrete wall
The room that previously housed the cows and sheep has an isulated concrete wall sourrounding it. As seen in the picture to the left the wall has stared to fall out. It is common in abandoned barns that these walls quickly decays, du to variation in temperatures. The conclution is that it should be removed in its entirety and be replaced by a new structure that can support the structure above.

2. Loadbearing beams
The movement of the concrete wall has allowed water to enter the structure. As a result the loadbearing wooden beams shows signs of rot. Only the ends of the beams seems affected . One could try to mend the damage or change the beams completely.

3. Concrete floot
The barn has partially a concrete floor, primarily in realtions to the animal rooms. It is not insulated and has visible cracks in a number of places. The prefered solution is to remove the existing floor and replace it with a new insulated floor.

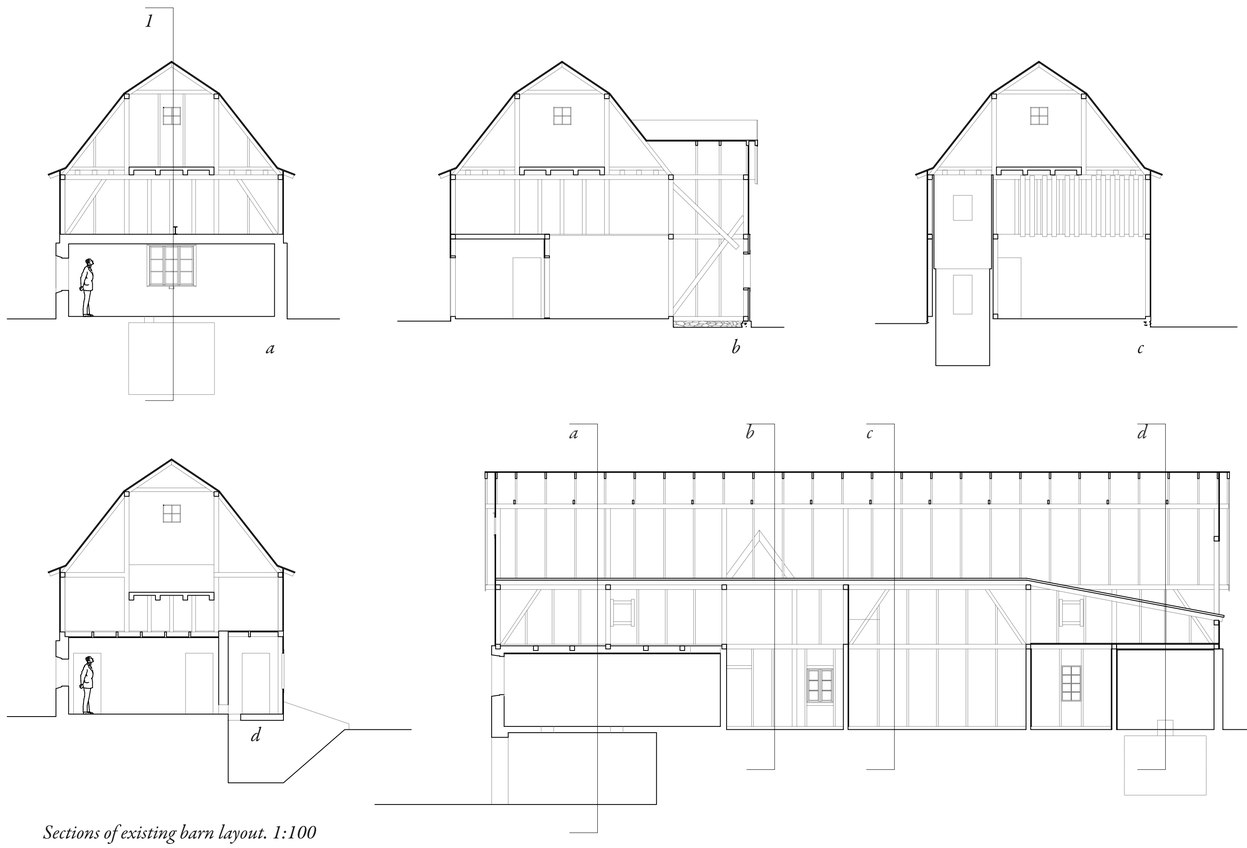
4. The brick wall
The brick wall in the stables are crumbling with large wisible cracks. It is not concidered a loadbearing wall, but it is possible that water may have reached the constuctive wood in between the brick layers. The wall should be torn and replaced.

The rest of the structure.
Apart from the areas mentioned above the rest of the structure has been well protected from weather and water Though the timber frame is rough there is little signs of rot. There may be some damage on the sills.

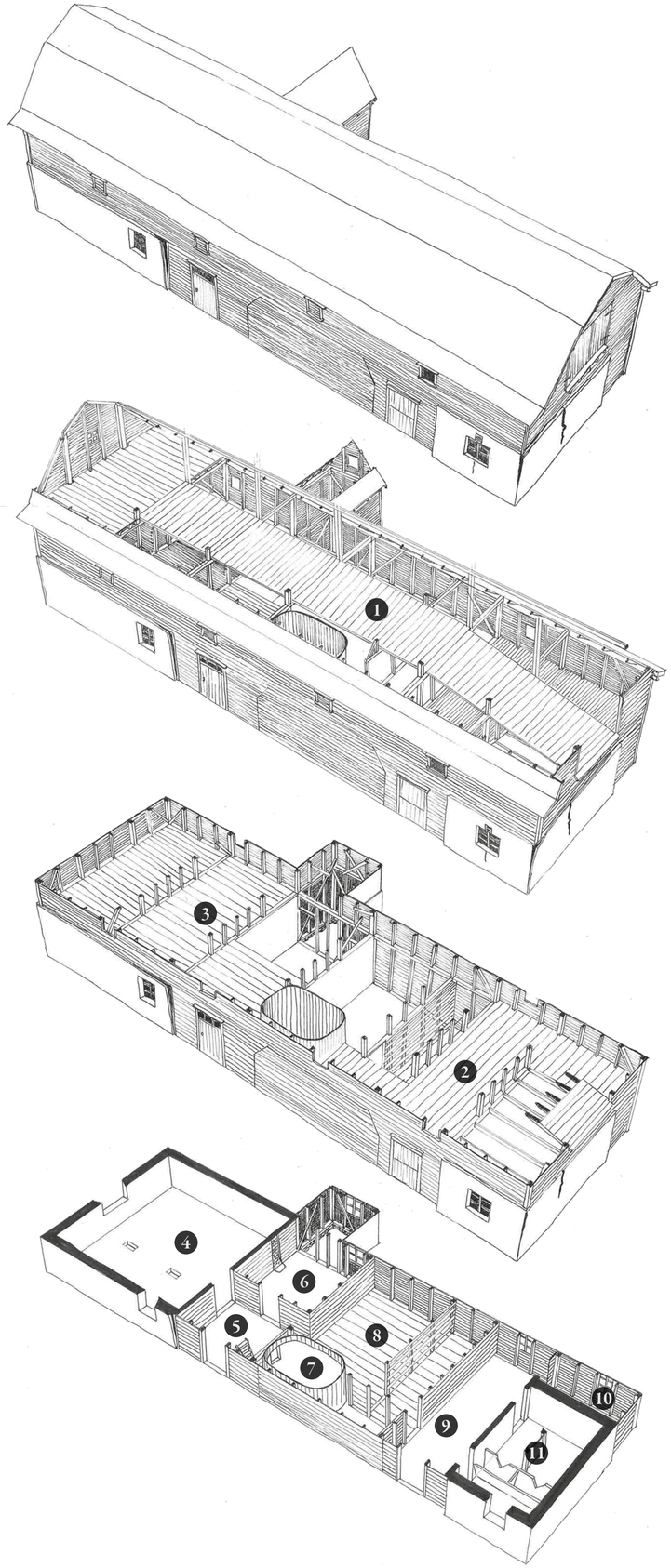
Case: KRONMOGARDEN

The Kronmo farm lies in the municipaliti of Tolga, only 20 minutes fram "the Mountain Capitol" Røros. The town fos founded when a smelter in relations to the mines at Røros was built close to Toljefossen, the local water fall. Since the primary industry was related to this, small farms was built around the smelter.

This makes the Kronmo farm interesting. The houses have a typical layout, but are unusually close to the town center. A small path crossing the outskirts of the tun is the main travel ore for pedestrians moving between the town center and the residential area.



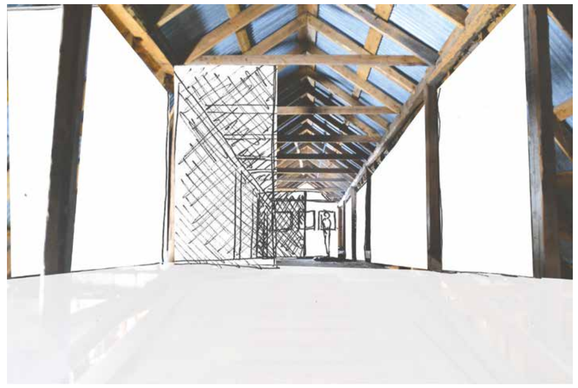
Sections of existing barn layout. 1:100



Second floor:
1) Barn bridge 77 m2

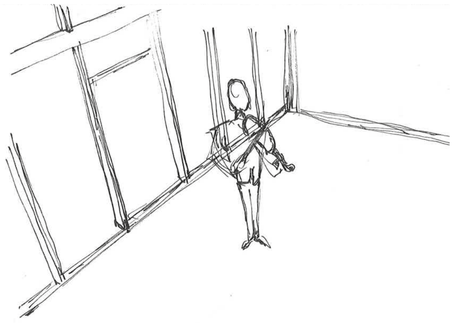
First floor:
2) Hayloft 1, 19 m2
3) Hayloft 2, 24 m2

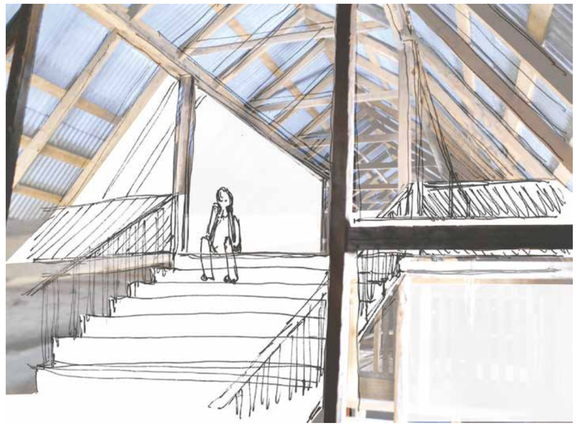
Ground floor:
4) Cow/sheep stalls, 42 m2
5) Entrance, 8 m2
6) Storage, 22 m2
7) Silo, 5 m2
8) Storage, 32, m2
9) Stable entrance, 17 m2
10) Stable storage, 5m2
11) Stable, 16 m2

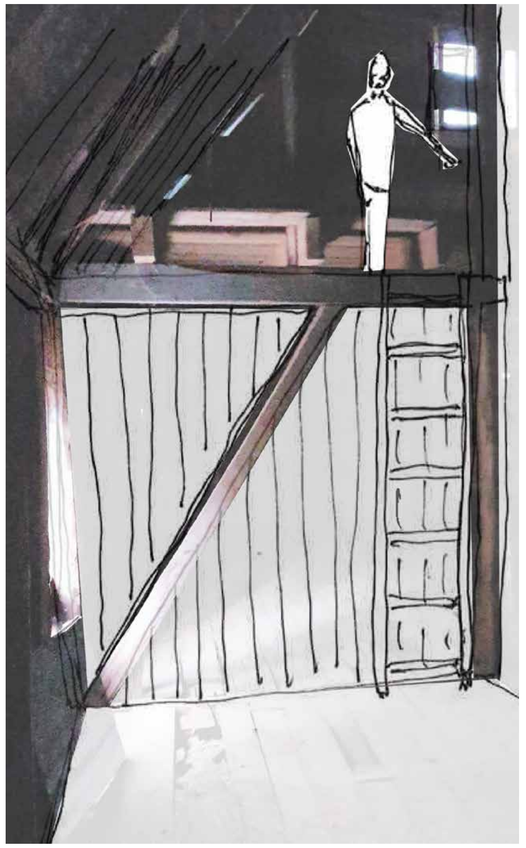


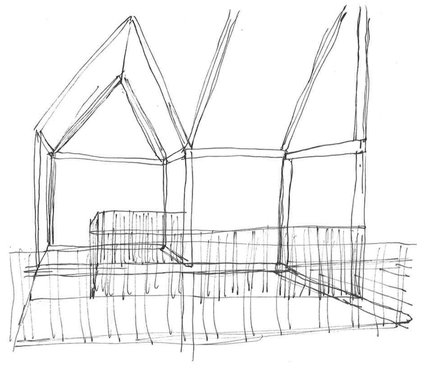
Room investigations

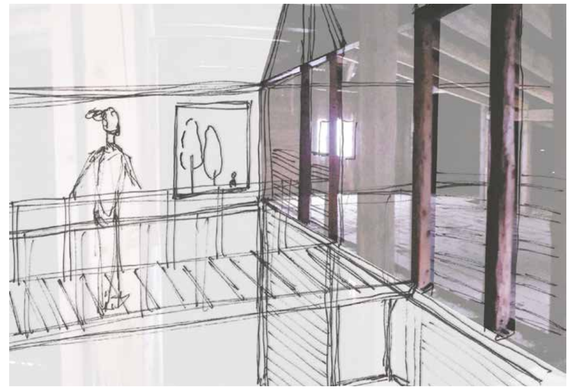
The picture shows how a transformation af this barn may appear.
The solution tries to keep some of the barn's openness while still being able to close off the individual rooms.

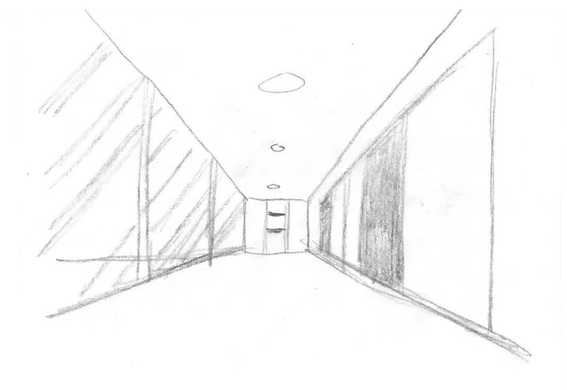


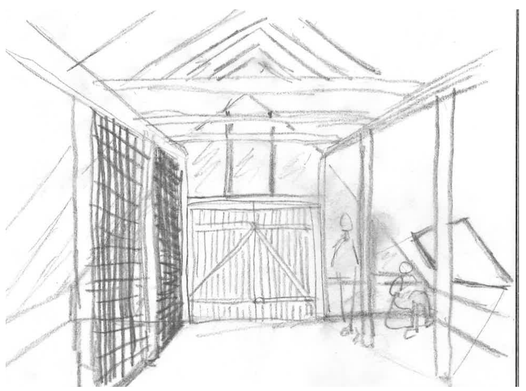


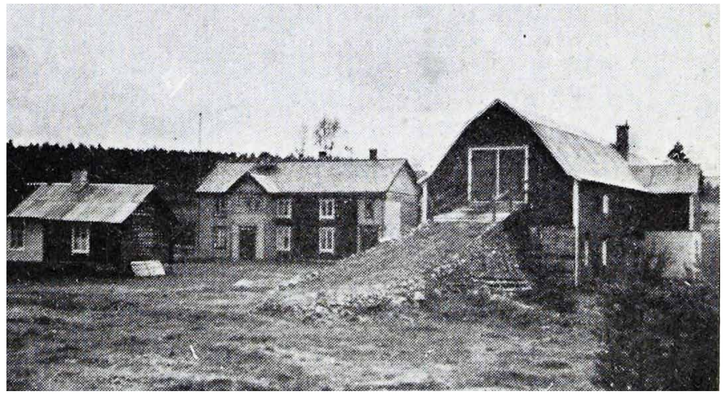


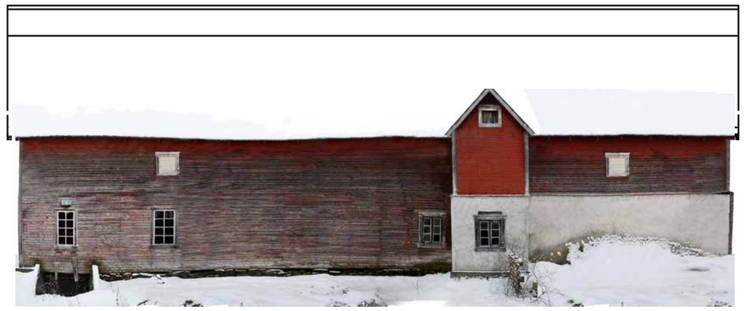












1. Town hall and police
2. Grocery store and offices
3. Library
4. Local Bank (TOS)
5. Health Clinics
6. Primary school
7. Vidarheim community house
8. Dølmotunet farm museum
9. Tolga station, train and buses
10. Industry area
11. Tolga nursinghome
12. Sætersgård Stafium

Program : No program

The decision of having no spesific program is based on the farms location and imagined future use. The farm is privately owend and it is likely that the owner would need some sort of income to benefit from the restauration/transformation. Because of this the main focus has been to figure out how one can create a flexible solution to the building, allowing the barn to change room sizes after what space is needed.

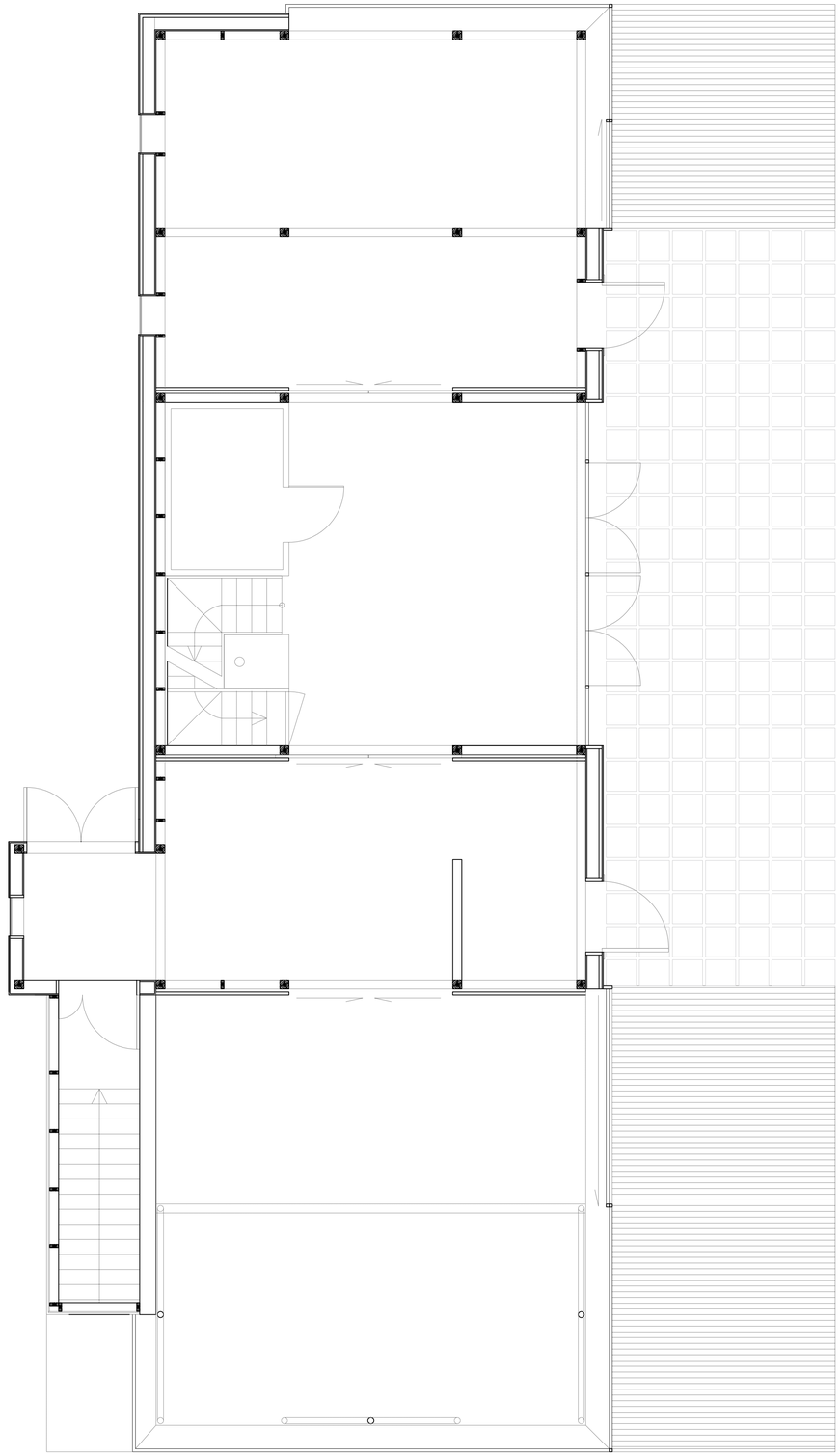
This is also a benefit if the goal is to rent out the barn to local bussinesses. In a small place like Tolga, it is hard to get an esablishement going and many face the need of closing their bussiness. If the barn had been tailored to the need of one specific program, say a music studio, it could be costly to refurnish the barn for the new next user. The key to a buildings survival is being able to adapt to new uses.

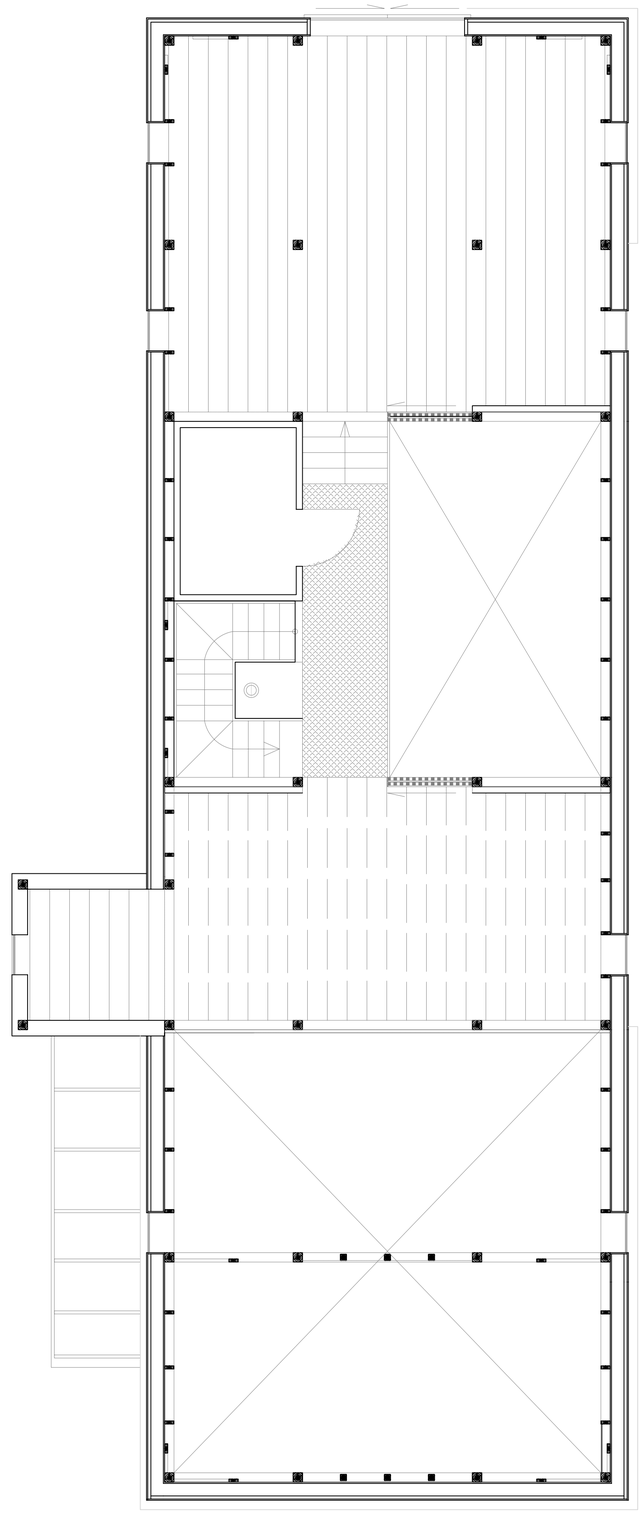
This building has already lost its main purpose, it is a goal trying to prevent it from happening again.

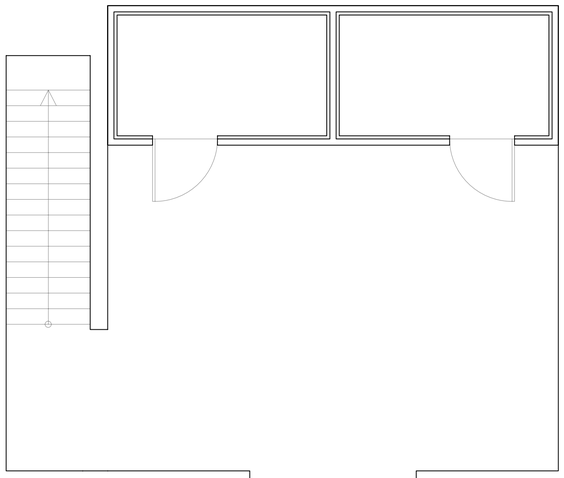
The new layout tries to keep the traditional tone in the building while applying the modern standards.

The main goal is to preserve the construction, but the visual appearance on the outside conserns the people living around the farm.

To be able to open up as much as possible sliding doors are introduced in the middle axis of the building. Placing the non flexible nessesities central but towards the closed side of the building allows large open spaces to face the exterior "tun".

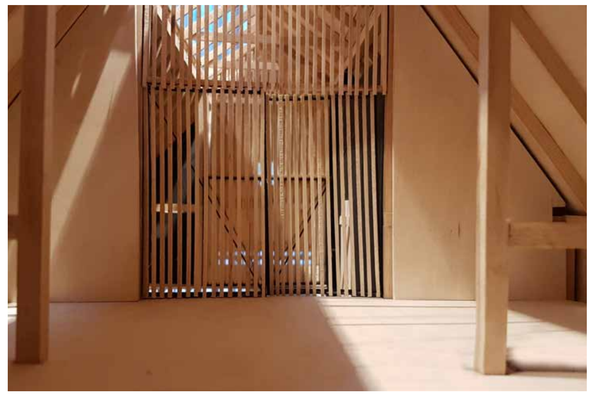






Before

After



Solutions

The picture shows how a transformation af this barn may appear.
The solution tries to keep some of the barn's openness while still being able to close off the individual rooms.

After

Before