

## Theme

The project is an activity centre open as a public space and will be designed around visually impaired teenagers, making the building inclusive and friendly for visually impaired youth. The Royal Blind School, Scotland's largest school for the blind, is located in Edinburgh, so the city has a large population of visually impaired teenagers. However, apart from the school, Edinburgh lacks an activity centre with a recreational and social function specifically for visually impaired young people.

Besides, visually impaired people are less satisfied with their current social and leisure life. It is difficult for them to integrate into the existing public environment and participate in social life because the existing public environment tends to create an overwhelming sensory experience that interferes with their recognition of the environment. In this project, there will be a comfortable and easily recognisable environment for visually impaired users, designing a place for them to enjoy their social and recreational life. Therefore, the project aims to improve the well-being of visually impaired youth in the area by providing them with a safe and fun activity centre through the renovation and design of the Fountainbridge Library.



There are four organisations associated with people with visual impairment in Edinburgh, all of which are not far from the site of this project.

### 1. RNIB Scotland

The Royal National Institute of Blind People (RNIB) is one of the UK's leading sight loss charities and the largest community of blind and partially sighted people.

### 2. Sight Scotland

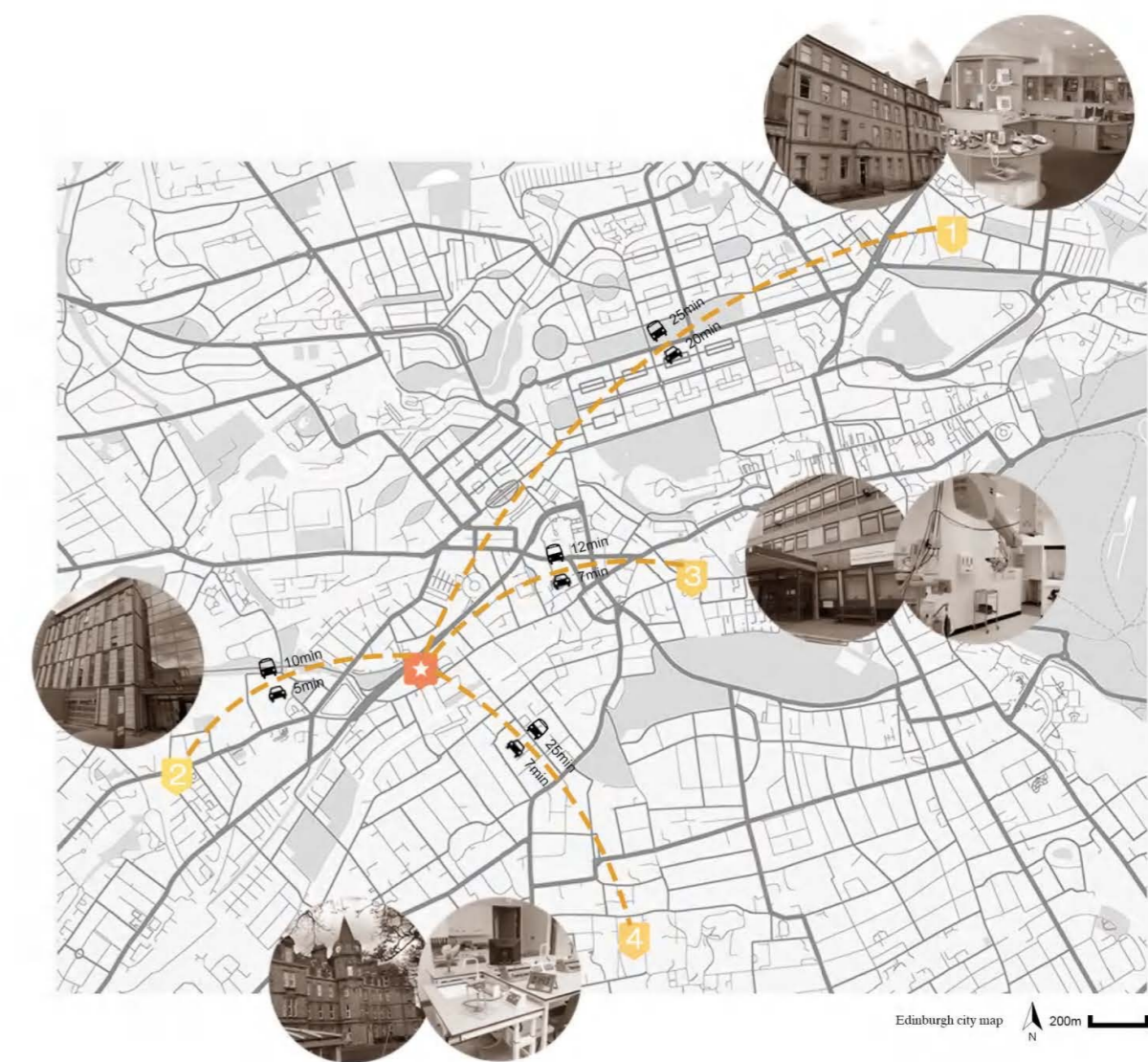
It is a charity that supports & cares for blind people of all ages.

### 3. Princess Alexandra Eye Pavilion

It provides specialist care for the treatment and management of diseases and conditions affecting the eye and eyesight.

### 4. The Royal Blind School

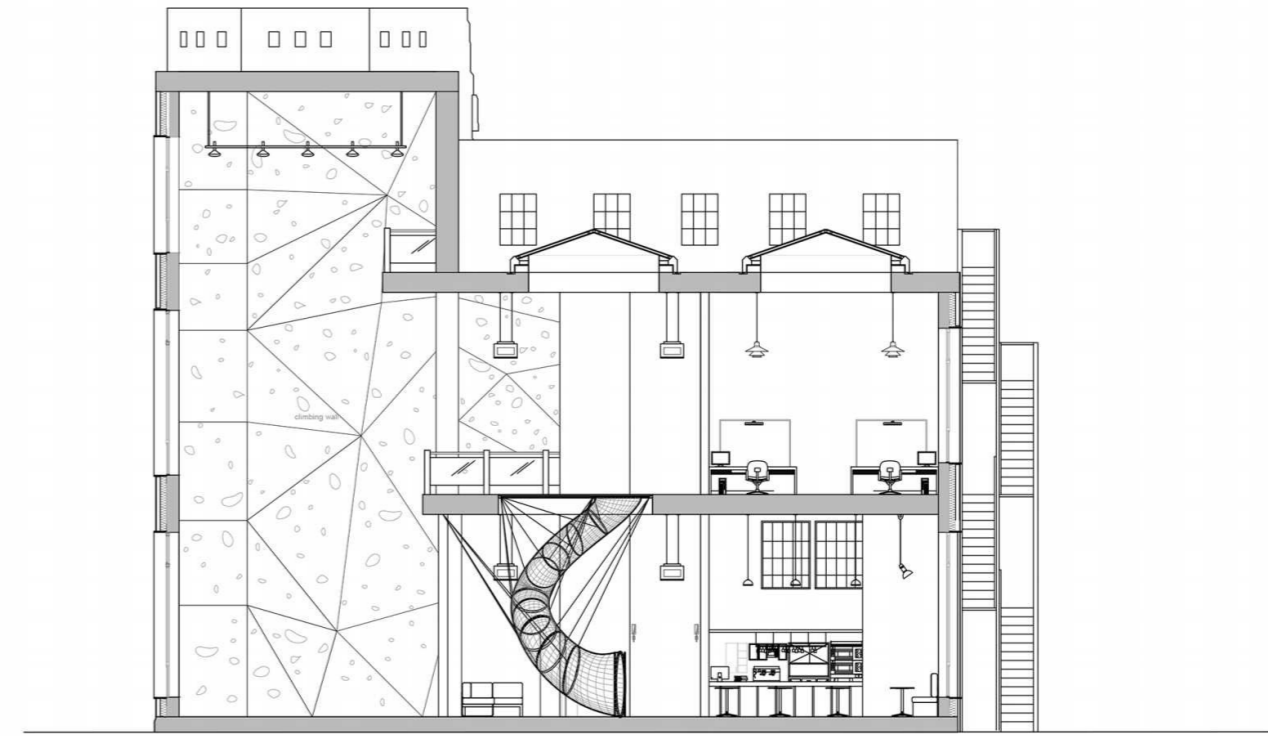
It provides specialist education, care and learning to children and young people with visual impairment, including those with additional complex needs.



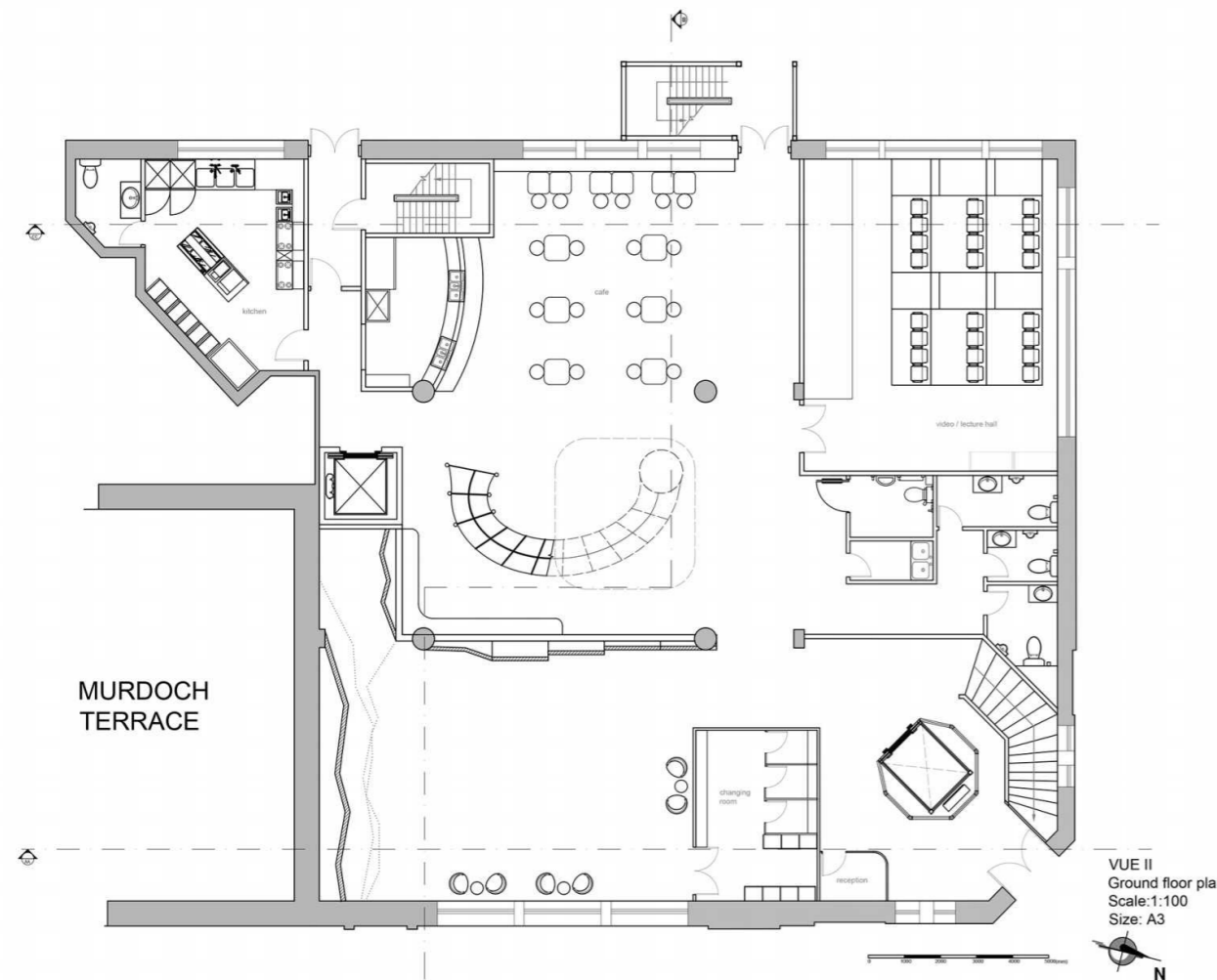


# Layout

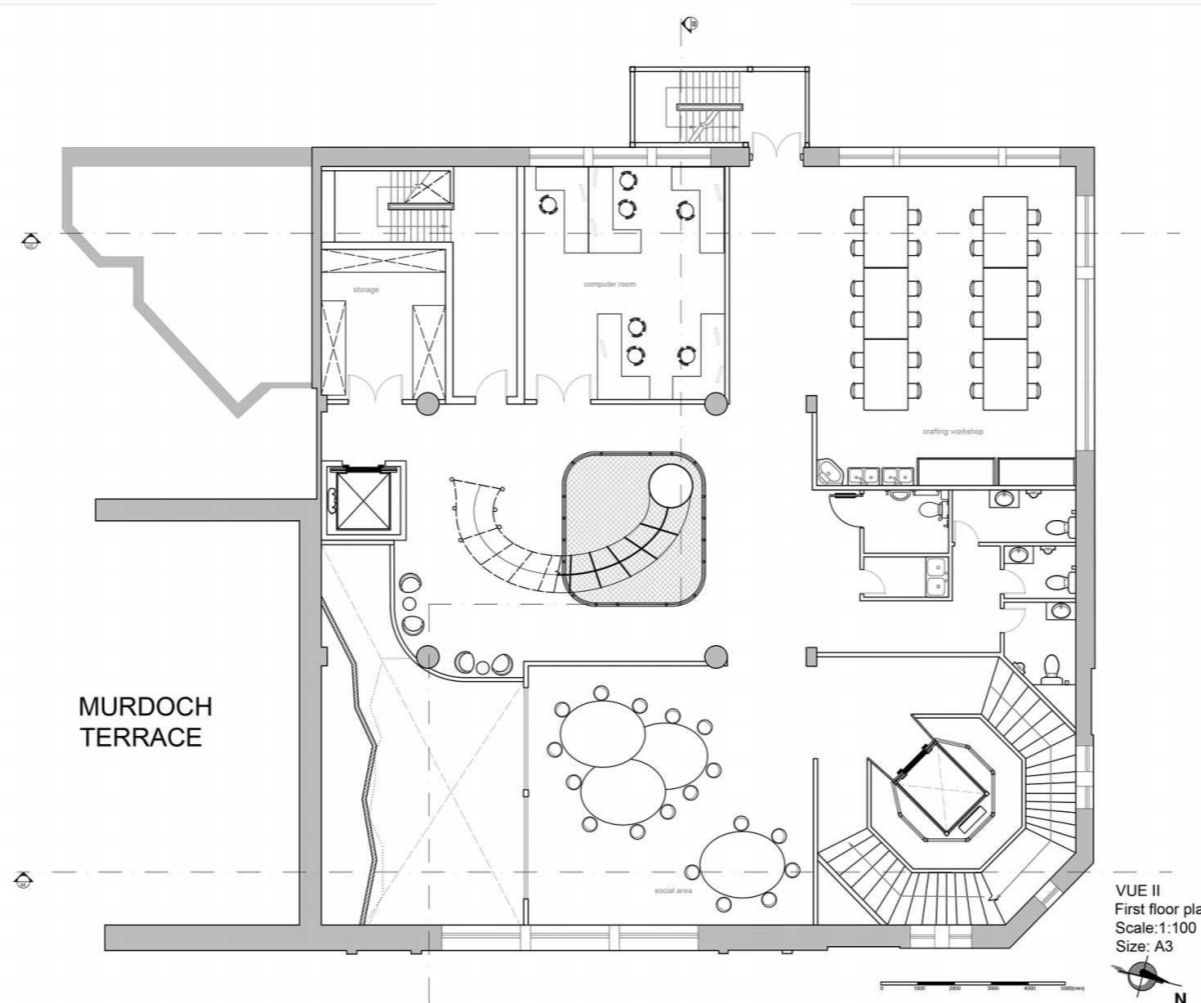
The project has three storeys, with the climbing wall running through all three floors and the climbing net at the centre of the building, connecting the ground and first floors.



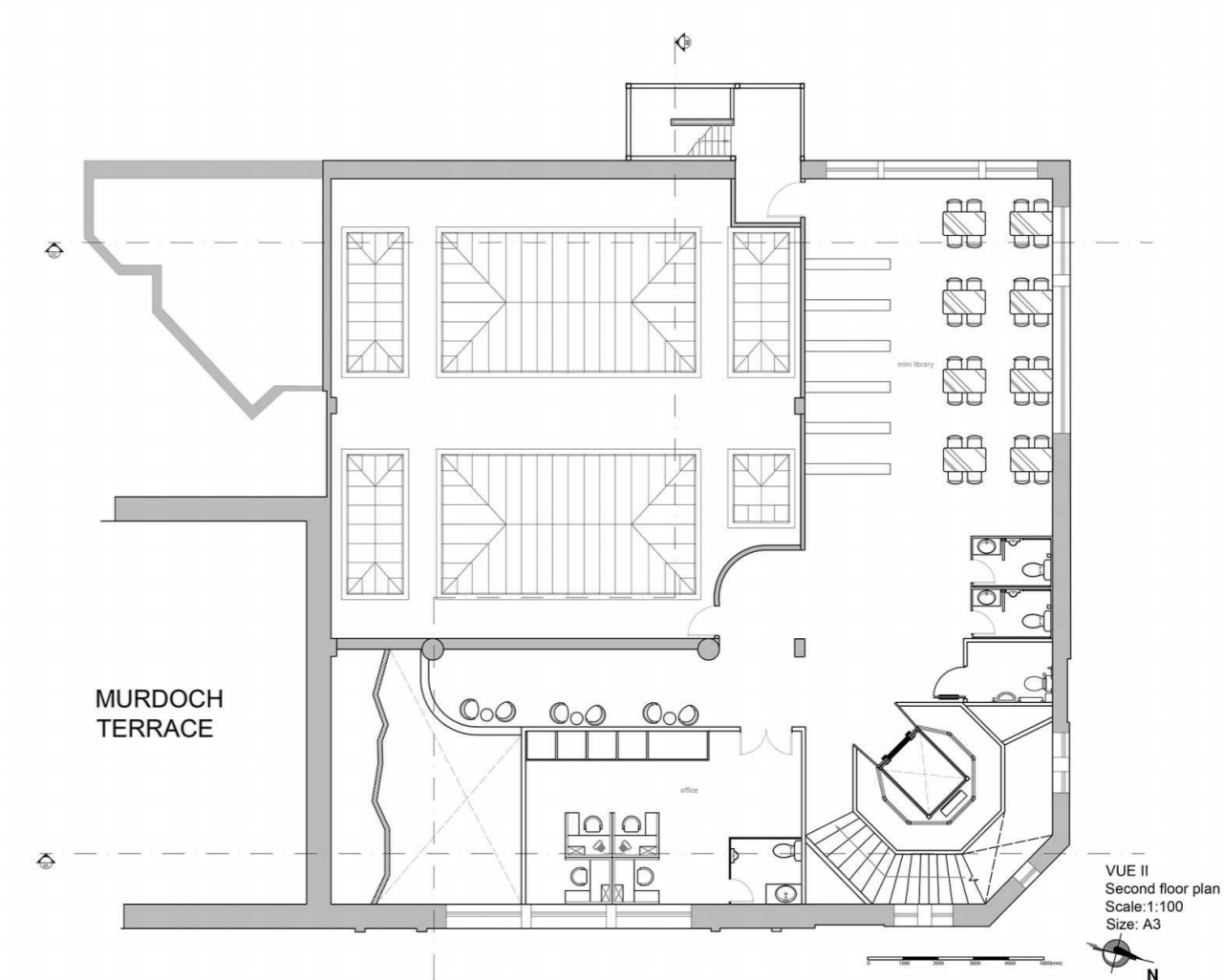
Section BB  
Scale: 1:100  
Size: A3



VUE II  
Ground floor plan  
Scale: 1:100  
Size: A3



VUE II  
First floor plan  
Scale: 1:100  
Size: A3

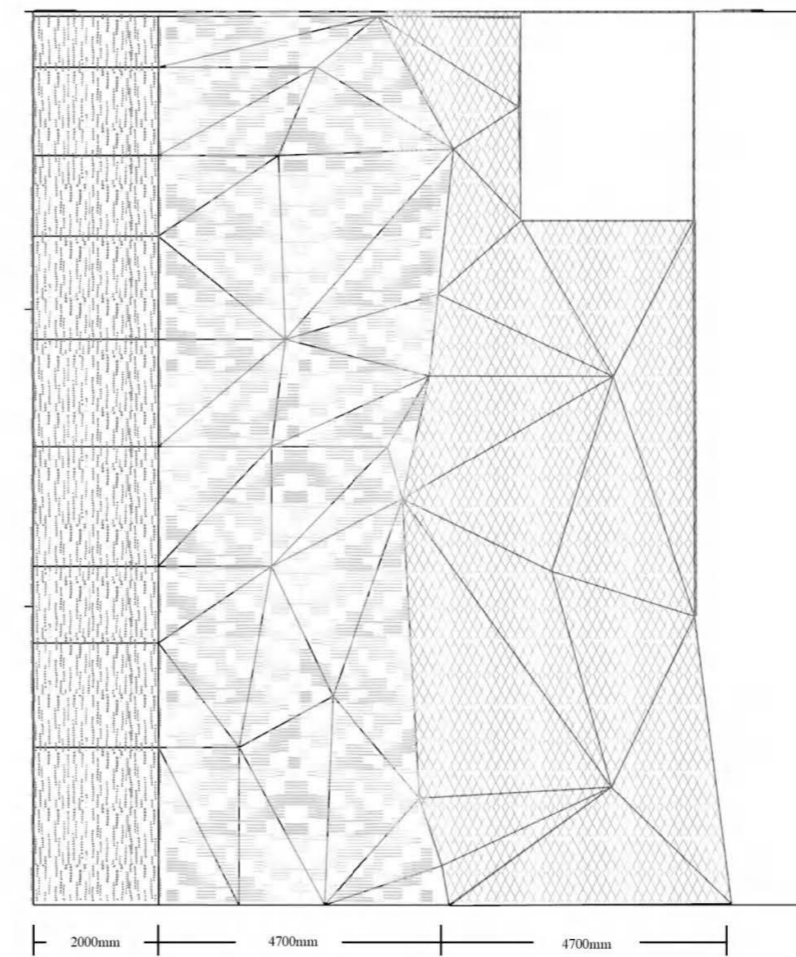
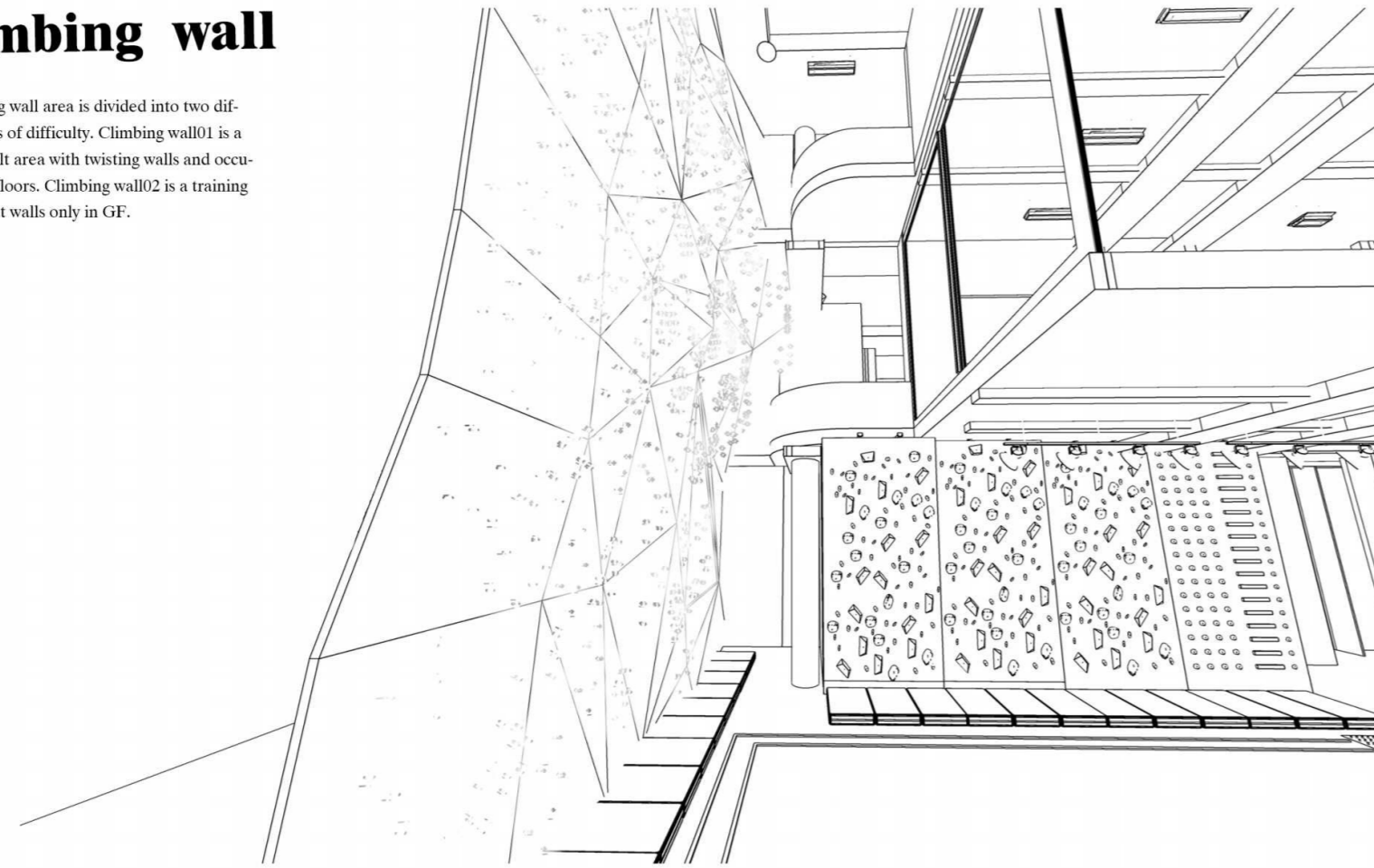


VUE II  
Second floor plan  
Scale: 1:100  
Size: A3



# Climbing wall

The climbing wall area is divided into two different levels of difficulty. Climbing wall01 is a more difficult area with twisting walls and occupies higher floors. Climbing wall02 is a training area with flat walls only in GF.

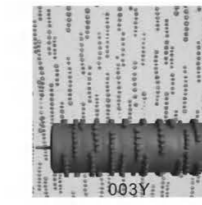


## Climbing wall 01

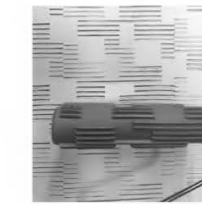
Three different textures are applied to the surface of the climbing wall by means of three different paint rollers.

1. The user is given a different tactile cue to know the difficulty of the route by the texture.

2. The texture helps to prevent the bolt from catching the threads.



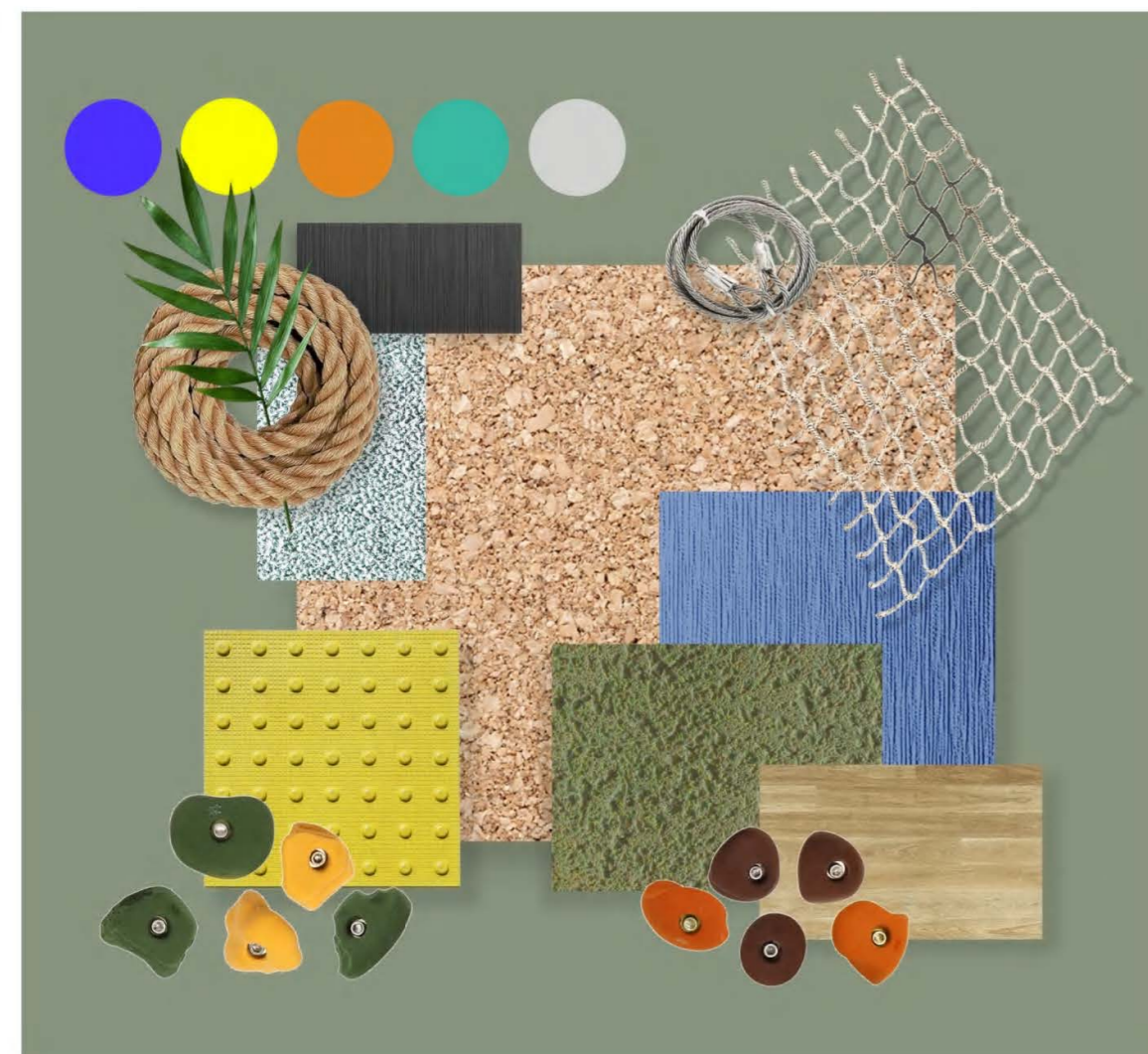
**Route 1**  
The regular gentle turns of the wall reduce the difficulty of rope climbing and are suitable for second-stage beginners or newcomers with experience in the sport.



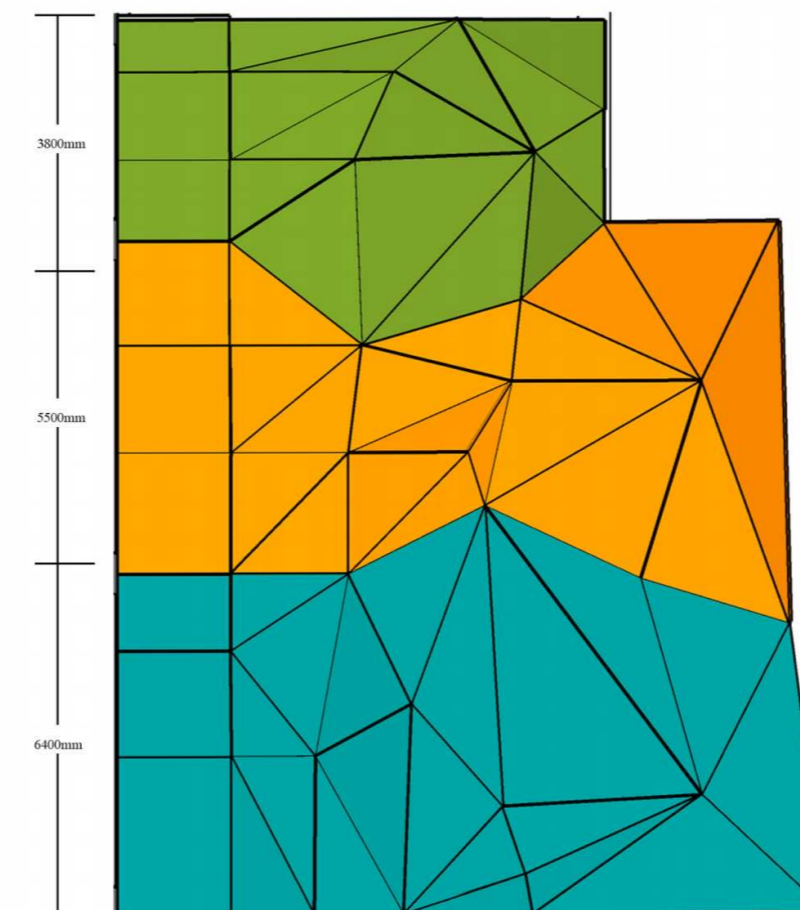
**Route 2**  
The steeper walls make the route a lot more exciting, and the irregular changes can bring a challenge to advanced climbers.



**Route 3**  
The greater angle of the wall makes for tough climbing. The path is suitable for mature and skilled climbers to take on the challenge.



As users are visually impaired young people, saturated and contrasting colours are used. Materials with a distinctive, special touch are also used in the interior. In addition, the nets in the Climbing area and the materials for the climbing wall bring a sporty and relaxed atmosphere to the interior.



## Climbing wall color paint

In addition to the different textured paints that suggest different routes, three large blocks of saturated colour are used for three heights, thus suggesting to the partially blind climbers the change in height of their position.

RAL 6017



RAL 2000



RAL 5018

These images simulate the visual experience of a partially blind person by blurring and reducing saturation, etc., to get a feel for what the colour contrast is specifically like.





**Weight sensing system - Trigger Lights**

When the climber grabs a hold, the pressure sensor will feel that and then light up the hold and other holds within 40cm of it (the distance it is possible to touch) to indicate the location of the holds that climbers could grab next.

**Colour**

When not glowing, the holds are white, a contrasting colour to the coloured walls.

When illuminated, the light colour is coloured and contrasts with the whiteholds.

It is also worth noting that the luminous colour will be distinguished from the wall colour (i.e. no blue and green lights are used for 0-6400mm blue wall; no orange and red lights for 6400-10900mm orange wall; no blue and green lights for 10900-14700mm green wall.)

