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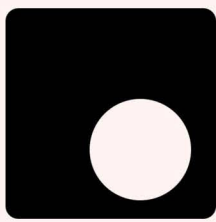
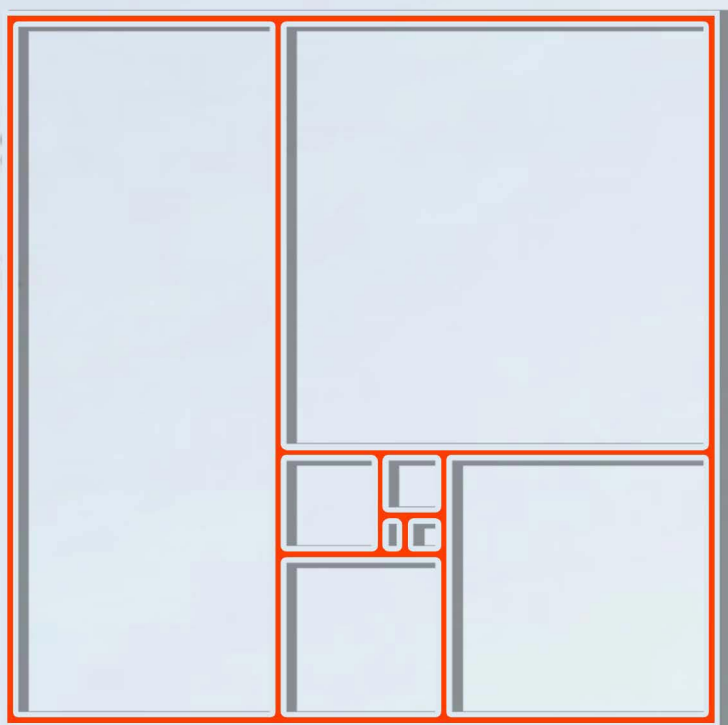


HEAL

[HEAL BODY, HEAL SOUL]

WITH THE DATABASE

A PROJECT TO RELIEVE AGING AND COMMUNITY MEDICAL SITUATION



ARCHITECTURE INFORMATION

Since the 20th century, China is facing more and more medical problems.

1.aging China's aging has two first in the world. One is the aging population of the world's first and the other is the aging of the world's first. Aging will reduce the activity of an economy, aging and less child (that is, 0-14 years old population is too small) superimposed. It means that a huge pension risk pension insurance will face "pay less". The dilemma, and the reduction in the working age of the population means that the future pension service prices, and even the elderly can not afford to buy the right service situation.

2.Low operating factor of community hospital China's basic health care facilities account for more than 80% of the total medical and health facilities, but its role is indeed very small. Most people are more inclined to the city hospitals which have better medical conditions than community hospital. At the same time, good doctors are not willing to work in a small hospital, and small hospital's medical level is getting worse, which further exacerbated the uneven distribution of medical resources and the lack of medical resources.

3.medical costs is getting higher and higher As more people tend to medical treatment in city hospitals, hospital fees, medical expenses, transportation costs will be higher than the basic medical facilities. Meanwhile China's health care investment accounted for only a small percentage of GDP, which means that personal medical expenses will increase.

Conditions: Big data technology and application has been carried out in many research institutions, and medical data applications have reached the tipping point.

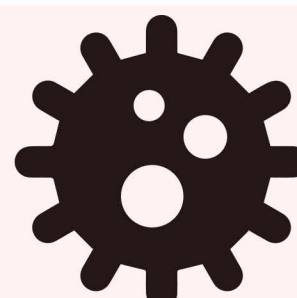
Since 2010, more than 200 companies have developed innovative applications and data analysis tools for medical information (for physicians or patients). With the knowledge of medical data technology and the deep understanding of the medical industry, some of these applications will be able to significantly reduce the current expansion of medical expenses.

the design features The design is based on medical big data, focusing on the following aspects.

Green energy saving: roof rainwater harvesting system, natural lighting system, temperature control system, natural ventilation system.

Between the man and the nature of the building, the courtyard into nature, the slope of convergence in nature, in this hospital, the patient is no longer see the cold room, equipment, but with the natural harmony of man and nature: Where people can sit in the courtyard to chat, you can exercise on the ramp, you can stand on the roof to see the distance. We hope that the community medical resources can be better utilized, and everyone can more easily get the best treatment. Each patient in the hospital can see a hopeful and vibrant tomorrow.

BASIC FACTS ANALYSIS



CONCEPT

The design is inspired by the concept of traditional Chinese garden design. The Chinese gardeners use a unique gardening approach to organize the landscape in the limited space. By this way, the environment and the building will be more naturally together. In this building, we strongly cited the traditional Chinese metaphysics concept - Tai Chi. At the same time, the Chinese garden focuses on the use of people and the natural combination between buildings and humans.

As a new community hospital design, we hope that patients in the building get not only physically cured, but also the spirit of treatment. So we bring nature into the hospital in the expectation that users better to contact with the nature. In the details of the deal, we focus on the exploration of geometry, so we use the golden section to complete the design.



SITUATION

1 AGING

By 2050, China's aging population (over 60 years old) will reach 31.2%, and China will enter the late stage of aging.

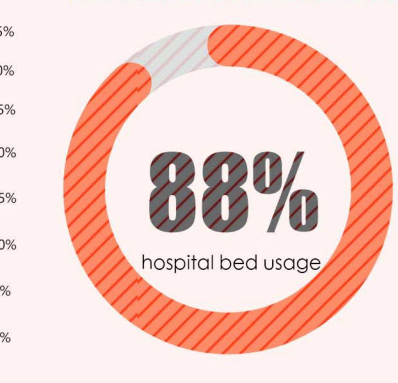
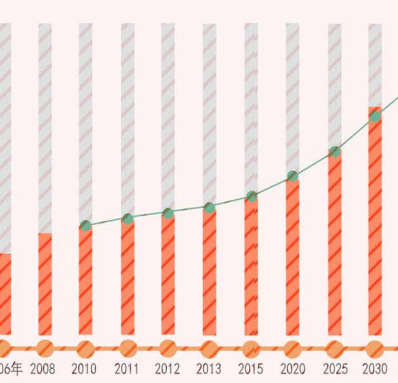
2 LOW EFFICIENCY OF UTILIZATION

Hospital bed usage is very high, showing that most people tend to treat in large hospitals, so that large hospitals become busy. Community hospital hospital beds use rate is low, although the number of many, but the role is very small.

3 MEDICAL COSTS

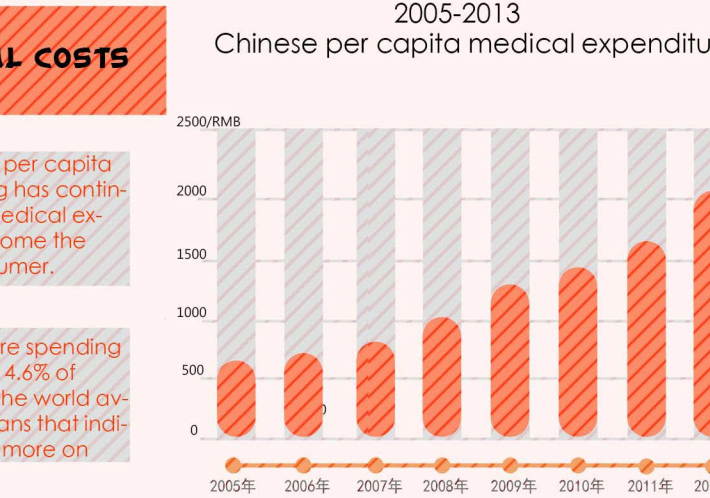
Recently, China's per capita medical spending has continued to rise and medical expenses have become the third largest consumer.

China's health care spending accounts for only 4.6% of GDP, well below the world average, which means that individuals will spend more on.



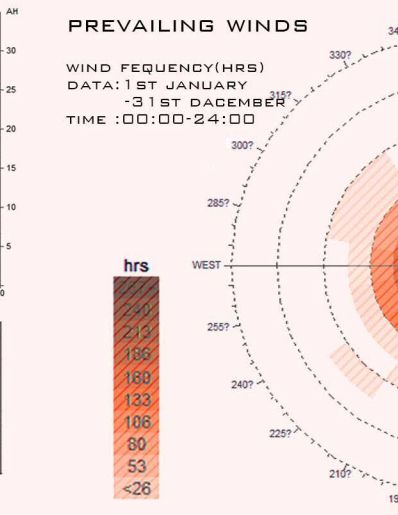
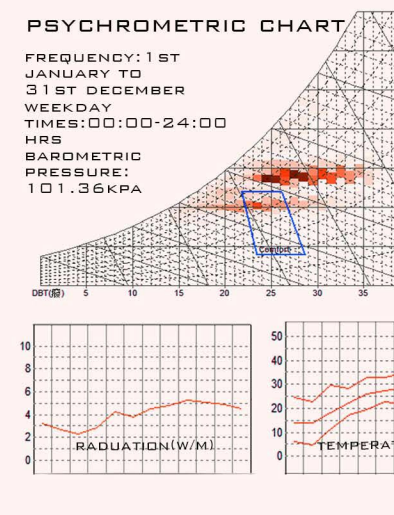
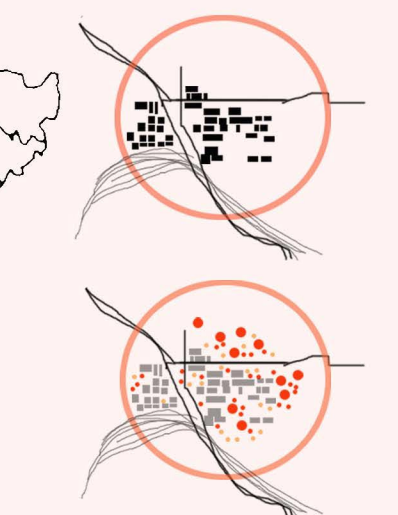
Chinese elderly population

Chinese per capita medical expenditure



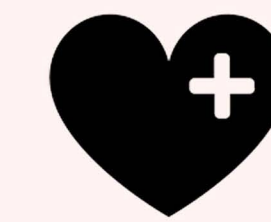
SITE ANALYSIS

Guangzhou has a humid subtropical climate influenced by the East Asian monsoon. Summers are wet with high temperatures, high humidity, and a high heat index. Winters are mild and comparatively dry. The relative humidity is approximately 88 percent, whereas annual rainfall in the metropolitan area is over 1,700 mm (67 in). With monthly percent possible sunshine ranging from 17 percent in March and April to 52 percent in November, the city receives 1,628 hours of bright sunshine annually, considerably less than nearby Shenzhen and Hong Kong. Extreme temperatures have ranged from 0 °C (32 °F) to 39.1 °C (102.4 °F).



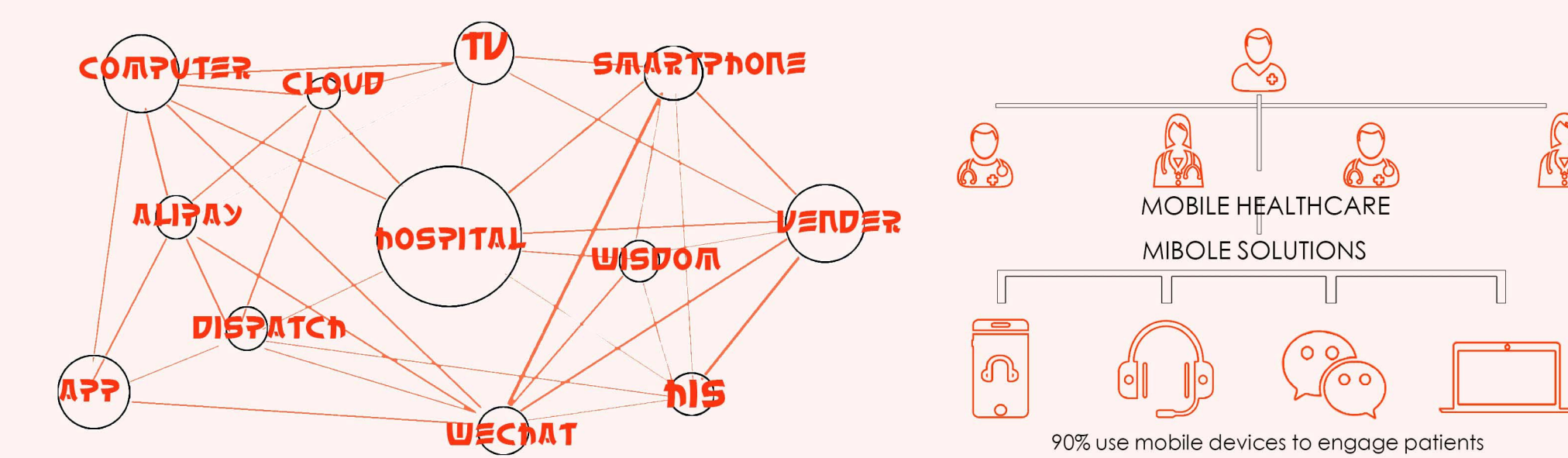
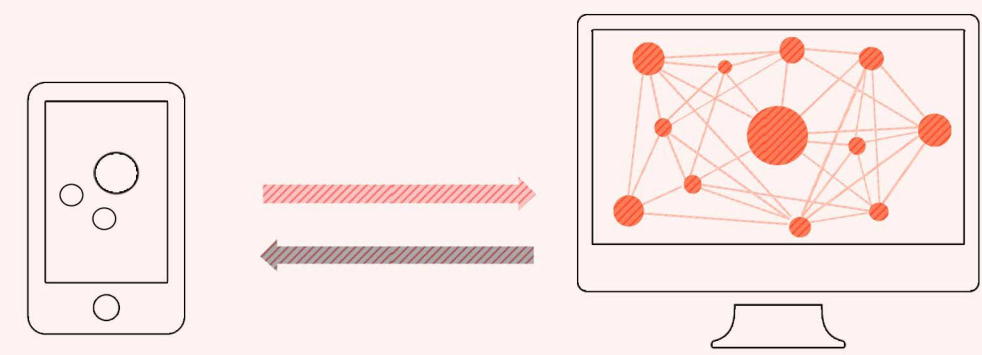
Because of the higher temperatures and more precipitation in the south, most elderly people who need treatment tend to stay at home rather than go out for medical treatment. Such a natural climate has its advantages. In the spring of the four seasons, vegetation growth, the combination of the garden and the medical location can not only solve the disadvantages of the southern climate, but also play the advantages of the southern climate, so that people who need rehabilitation treatment of physical and mental pleasure.

SMART



TECHNOLOGY SUPPORT

Now the traditional medical industry and Internet plus, rather than Internet. Mobile technology as the representative ubiquitous computing ubiquitous network development and to the production and life, economic and social development not only aspects of penetration technology penetration, promote the innovation in knowledge-based society form has attracted more and more attention.



Here's a heads up on the HIT trends and technology that will have a big impact on healthcare's increasingly competitive and cost-conscious environment.

MOBILE NETWORKING

30% of healthcare IT decision makers use cloud apps and services and 40% cloud storage can cost 10 less than regular storage systems.

70% of physicians use their smartphones to research medications at least once a week.

More than half of tablet users access EHRs daily.

3 million patients will be monitored via mobile networks by 2016.

DESKTOP VIRTUALIZATION

70% of hospitals identified thin or zero/ultra-thin clients as their preferred endpoint.

The adoption of desktop virtualization in hospitals is expected to grow 44% in 2013.

Benefits: fast, highly secure data access for mobile clinicians across workstations; low maintenance; ease of manageability.

DATA WILL CONTINUE TO PLAY A ROLE, BIG OR SMALL

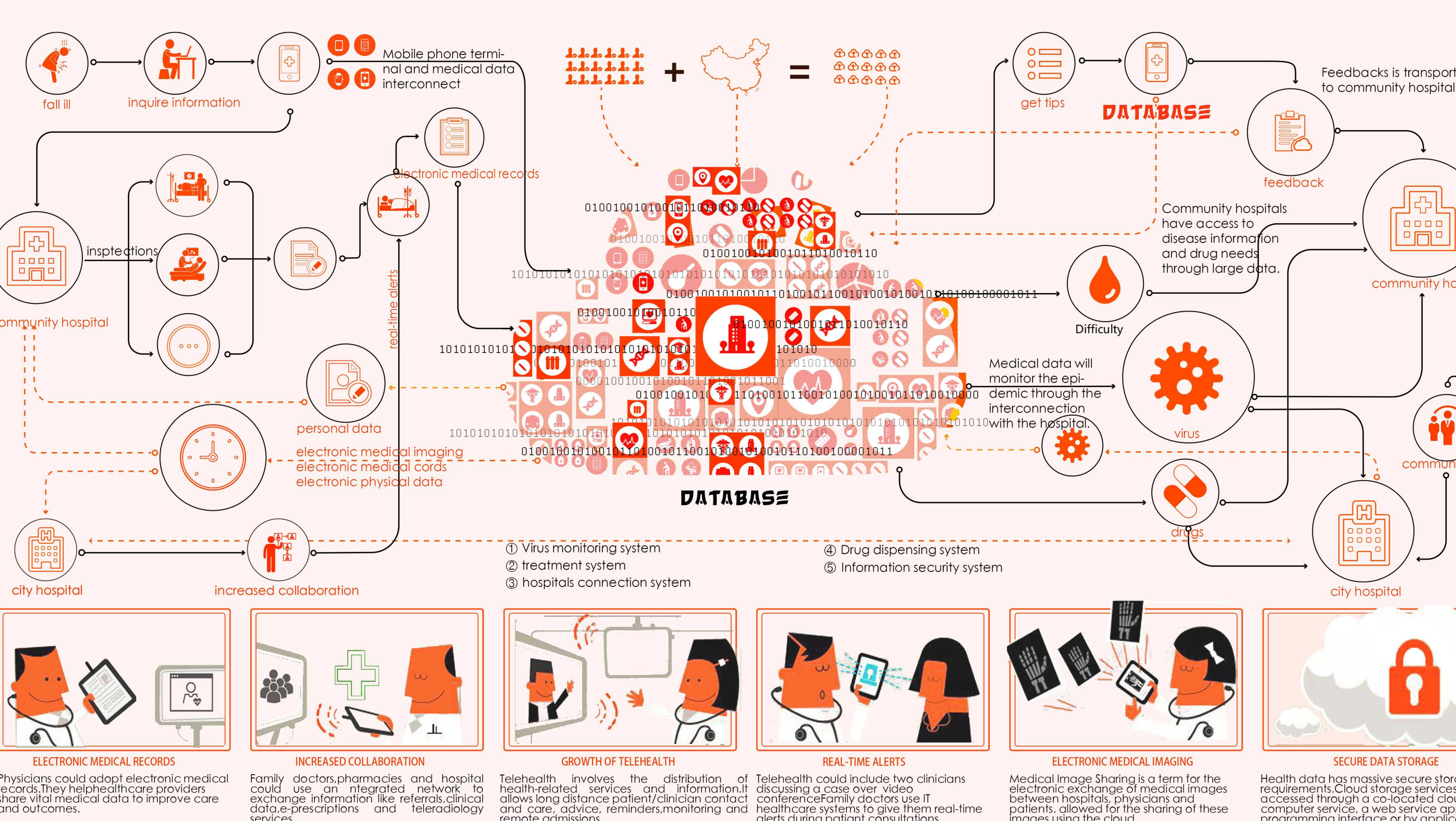
10% 50% of hospitals implemented data analytics tools in 2011. 1,500+ are predicted to do so by 2016.

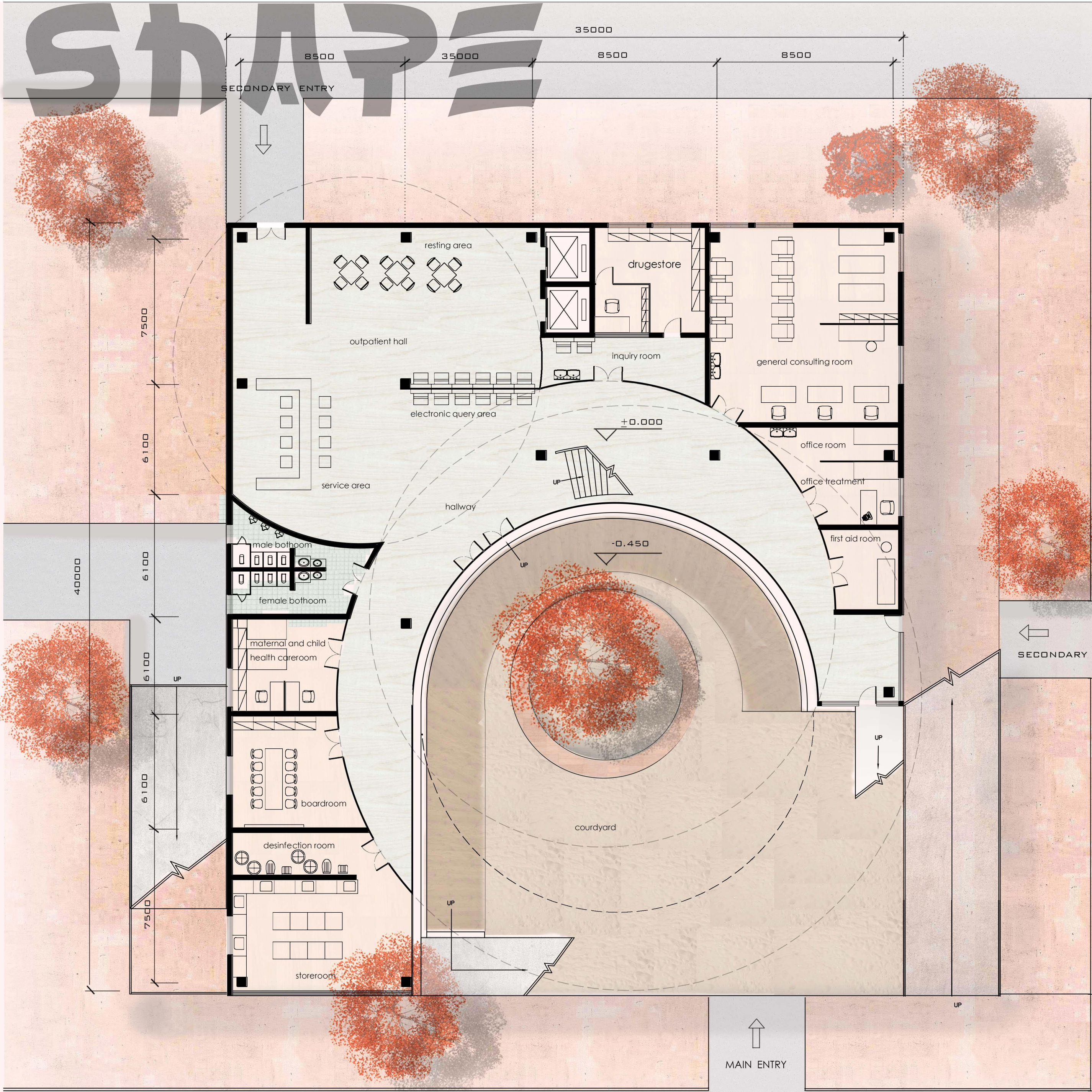
MOBILITY AT THE PATIENT BEDSIDE

66% of doctors use iPads or others for medical purposes up from 45% a year.

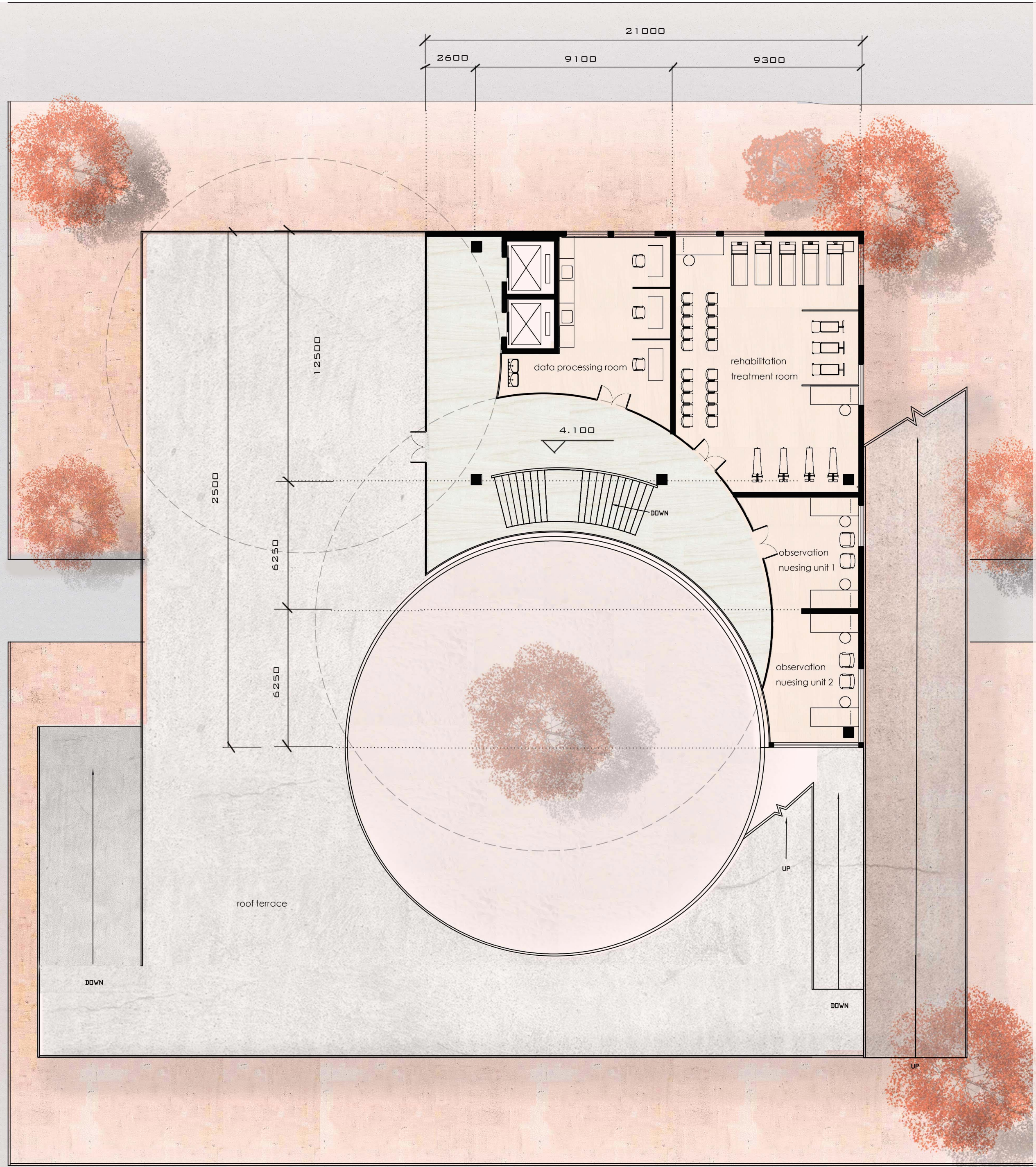
45% 66% of doctors use iPads or others for medical purposes up from 45% a year.

PROCESS

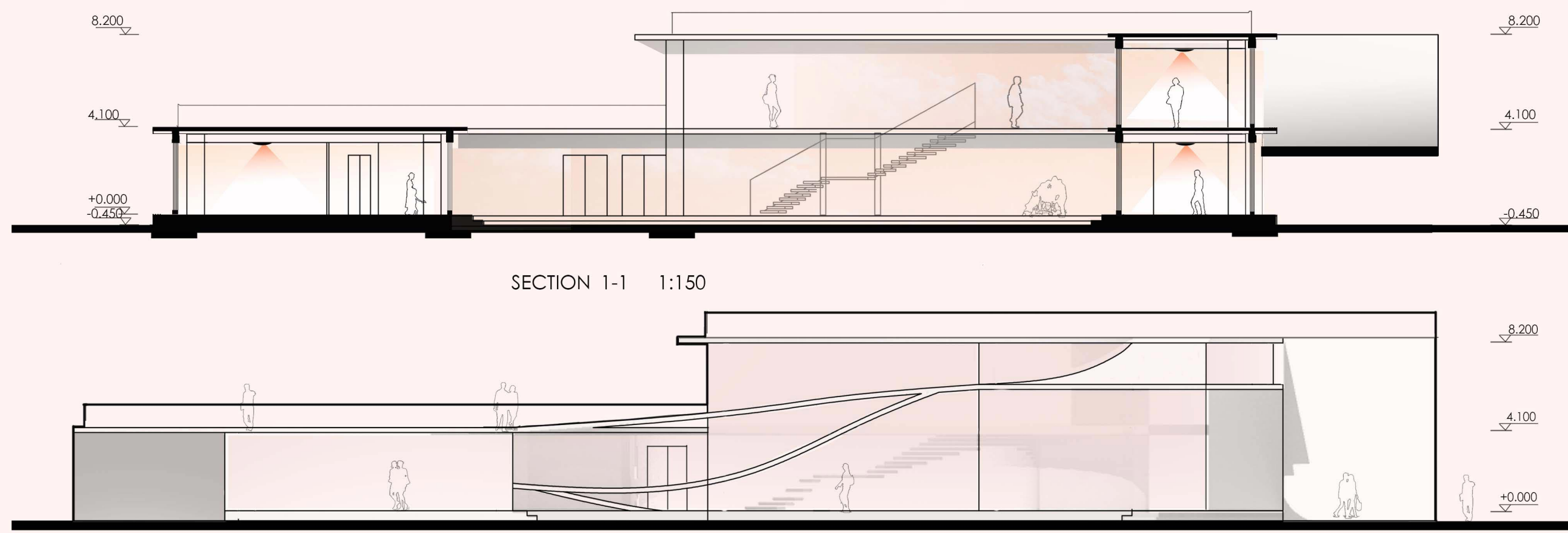




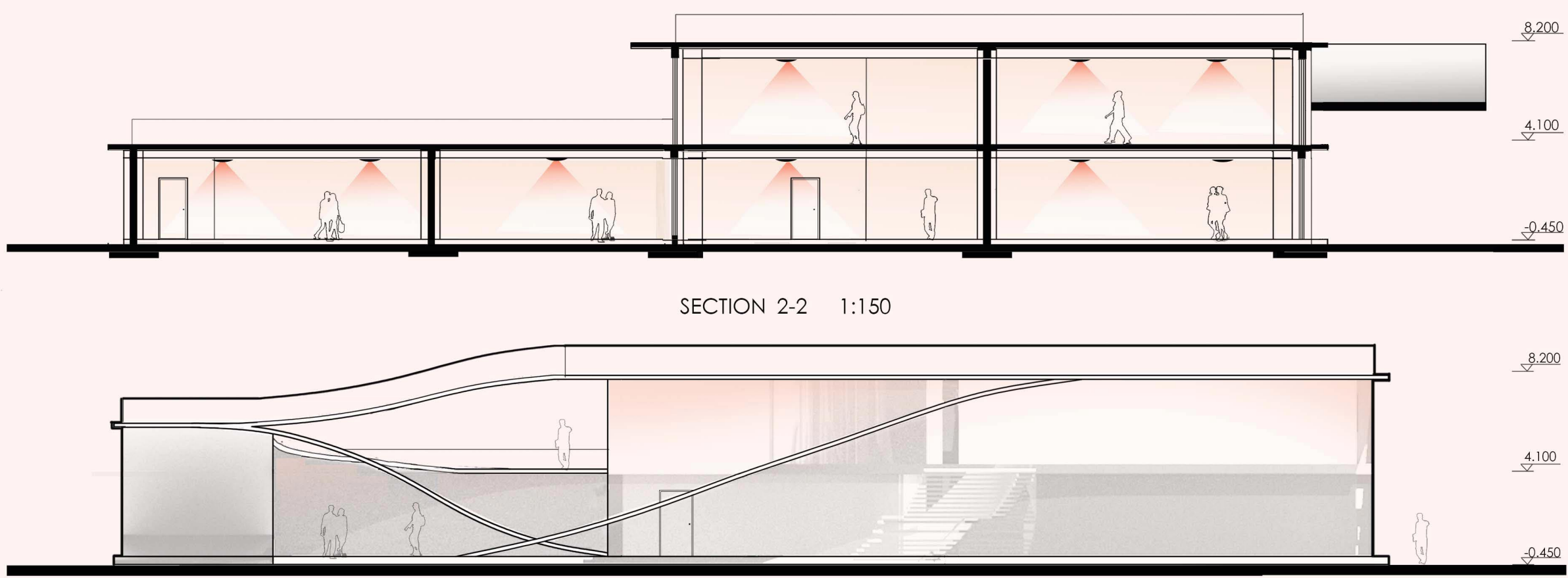
FLOOR PLAN 1:150



SECOND FLOOR PLAN 1:150



SECTION 1-1 1:150



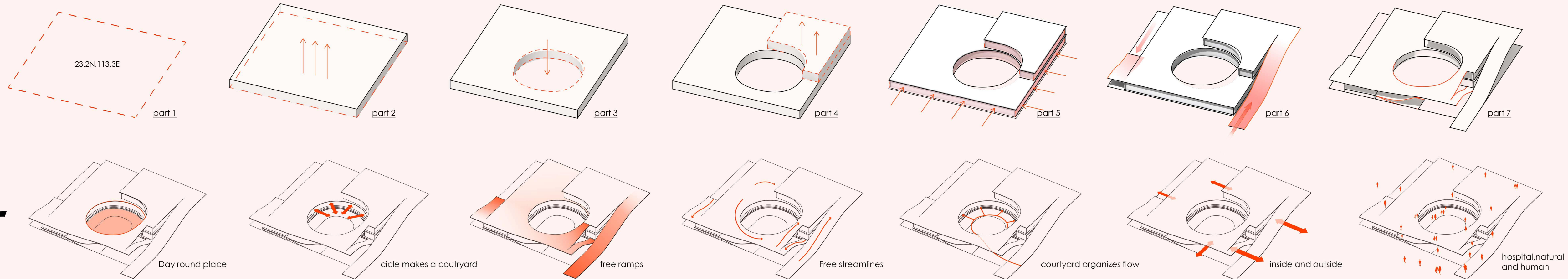
SECTION 2-2 1:150

BEYOND

ARCHITECTURE ENERGY ANALYSIS

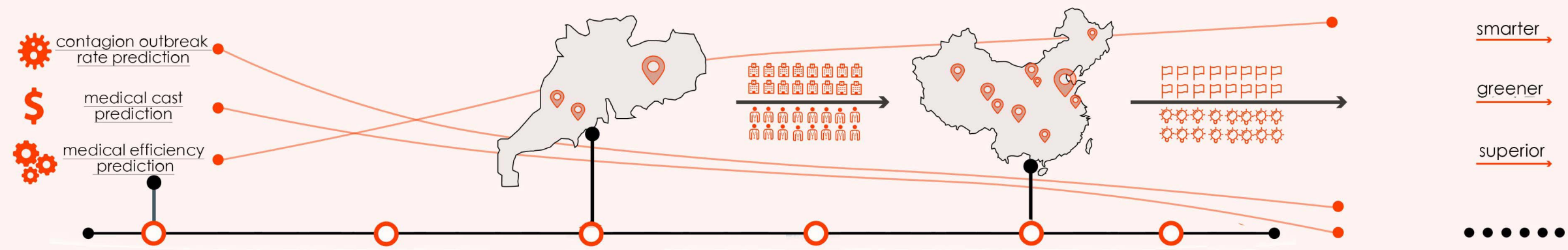


FORM



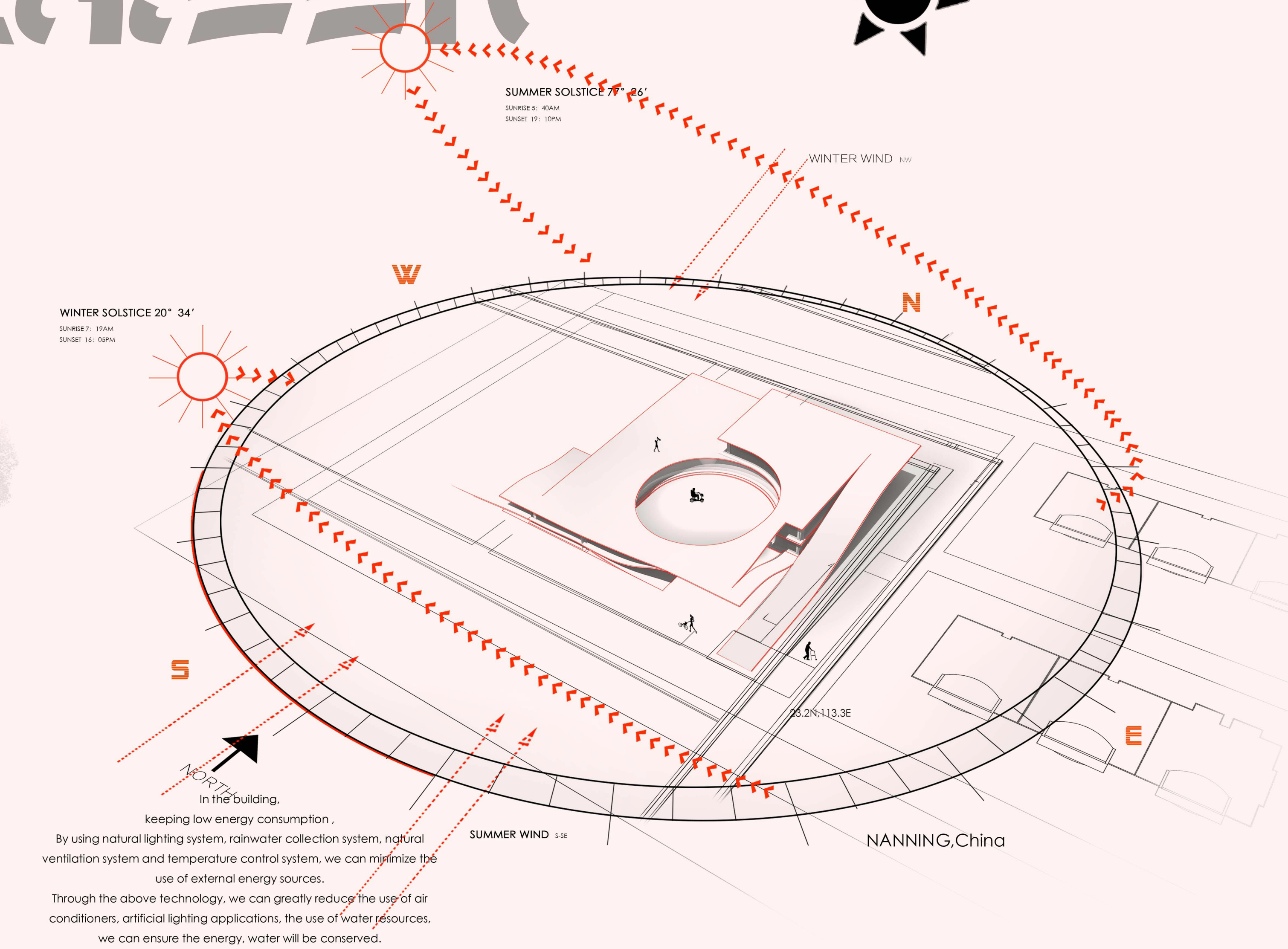
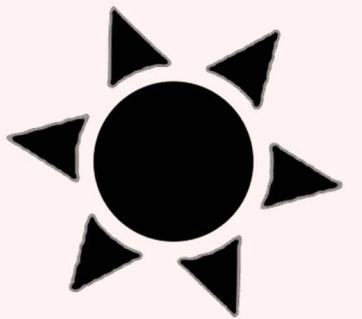
ENVIRONMENT

IN THE FUTURE

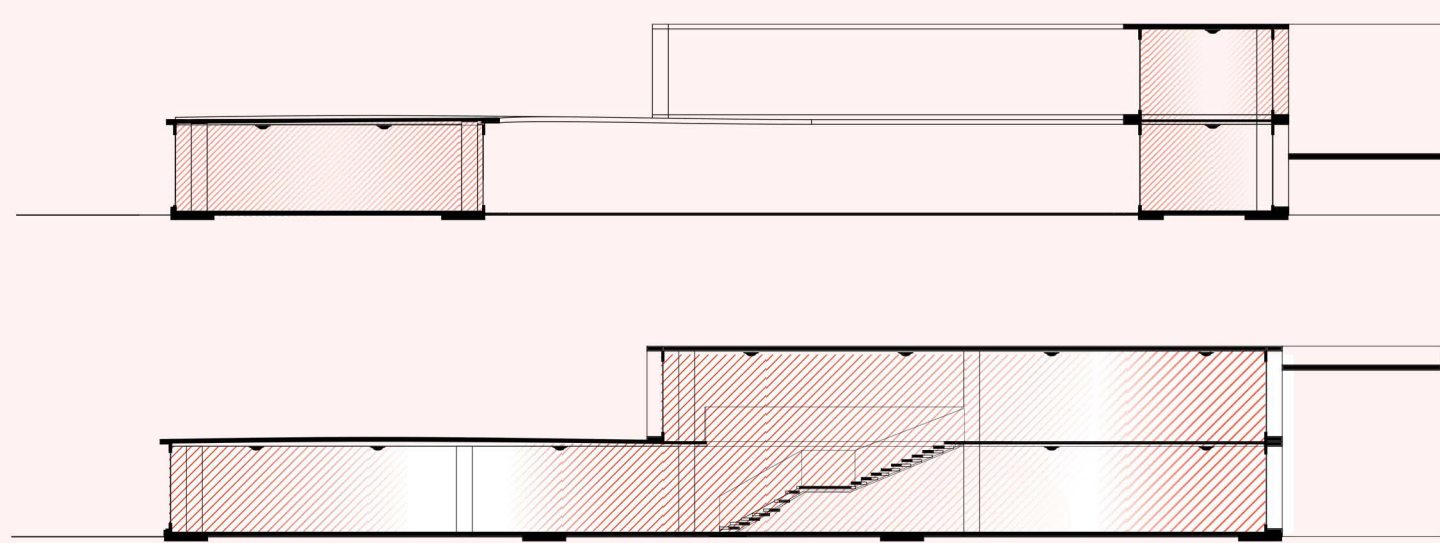


At present, the hospital doctor division more and more fine, but the doctor is more and more similar, this is mainly grasping the real-time and structured data is not strong; while the patient is an individual life, his organs are interconnected, we didn't have a general system to provide a global doctor now, we provide a global view. Big data combined with the park makes the community hospital to play its powerful service functions. This concept can be extended in areas such as sub-tropical climate appropriate, so that people in a pleasant environment for rehabilitation, from Guangzhou to China to the world. With more and more community hospitals similar to the program was established. The medical data should be next to the patient as the center, forming a "comprehensive view" structured network, open patient information. And the formation of structured data points turned to more accurate diagnosis. With the large database of health care increasing, this is not only conducive to the medical care of patients with care, but also more conducive to solve the problem of difficult to see a doctor, expensive, inconvenient to see a doctor. Last but not least if we build a predictive based health system in the community, people can detect their physical condition in time, greatly reducing mortality.

ARCHITECTURE ENERGY ANALYSIS

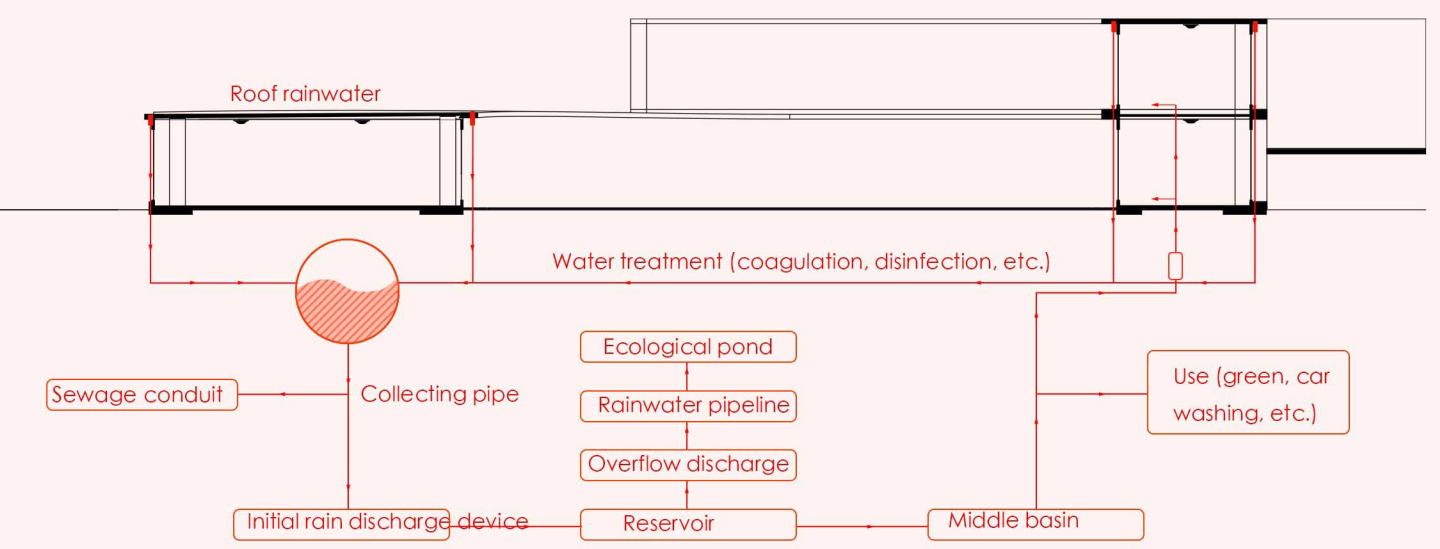


TECHNOLOGY



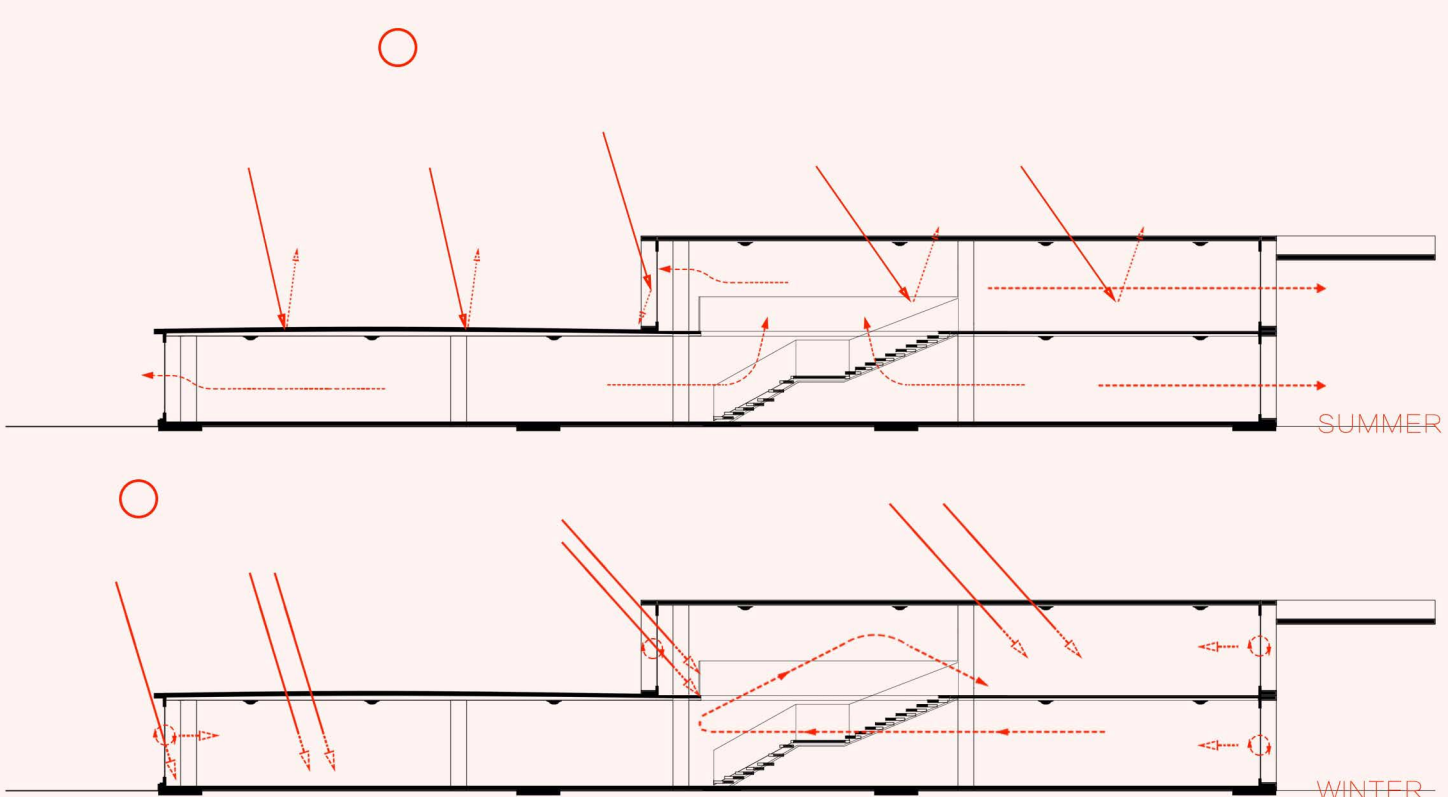
Natural lighting system

Natural light is a high-quality light source, it can restore the original color of the object, bring people more comfortable visual and psychological feelings. At the same time, for the purpose of saving energy, the natural lighting be set in the building. Meanwhile, because of the protection of the equipment, through the passive lighting device of the new lighting strategy, we can control the lighting in the museum. Lighting device will be UV shielding, infrared absorption in the pipeline, and it will not adversely affect the indoor environment and exhibits. So you can solve the problem of light radiation damage to the exhibits.



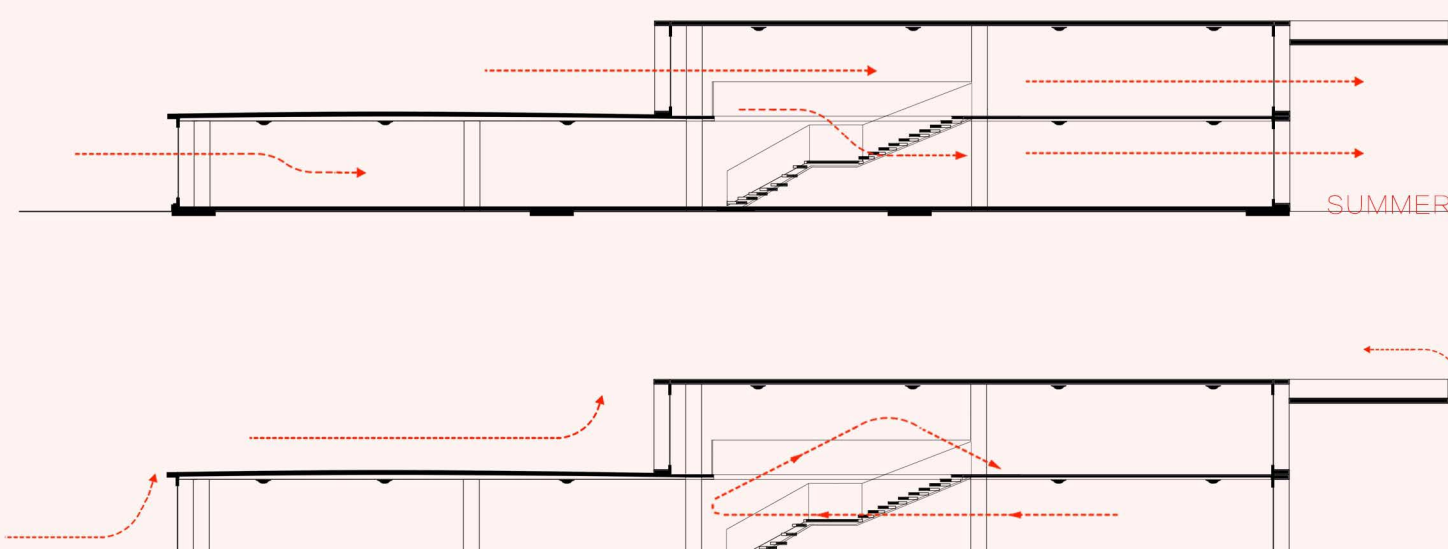
Rainwater collection system

The contradiction between supply and demand of water resources in China has a direct impact on people's lives, production and social development. Rainwater collection system is concealed, and the appearance is not easy to be seen. The roof of the building is used as a water surface, which is mainly used for non-potable water in public health, such as watering, flushing, cooling cycle, etc. The utility model has the advantages of saving drinking water, reducing the load of the urban drainage and processing system, reducing the discharge of pollutants and improving the ecological environment.



Temperature control system

Through the light, ventilation and other factors to control the temperature of the building, to reduce the use of air-conditioning systems in order to achieve the purpose of energy conservation. 1. Summer: Through cutting down the transparency of the facade of the glass and to strengthen the indoor and outdoor convection ventilation, to reduce the impact of high temperature in summer. 2. Winter: Introducing sunlight into the room as far as possible, in order to improve the indoor temperature at the same time using double glazing settings, a closed cavity within the double layer to insulate external heat.



Natural ventilation system

The building is located in the subtropical area, has a good ventilation environment. We not only set up air conditioning ventilation system, but also set up a natural ventilation system and divided it into two types of wind pressure and hot ventilation. 1. Natural ventilation under the action of wind pressure: the formation of wind is due to the pressure difference in the atmosphere. 2. The natural ventilation under hot pressing: hot pressing is caused by the temperature difference between indoor and outdoor air. Temperature difference, indoor and outdoor density difference, along the vertical direction of the wall will shape the pressure gradient.

BIOClimatic Schemes

