



Construction of Qinghai all-age compound pension model

— *A temple pension project based on the Ta'er temple*

Politecnico Di Torino

Master Thesis

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CONTENTS

PART I

1. Pension situation in China

1.1 Definition Of Aging Population

1.2 Aging Trend Of China's Population

1.2.1 Causes of China's aging population

1.2.2 Current situation of China's aging population

1.2.3 The trend of China's aging population

1.3 Characteristics And Behavioral Patterns Of The Elderly In China

1.3.1 Physiological characteristics of the elderly

1.3.2 Psychological characteristics of the elderly

1.3.3 Analysis of behavioral characteristics

2. Research on the current situation of nursing homes

2.1 Types of nursing homes in China

2.1.1. Public nursing homes

2.1.2 Private nursing homes

2.1.3 Private construction and public assistance

2.1.4 Public construction and private management

2.2 Research on the space of Chinese nursing homes

2.2.1. Living room for the elderly

2.2.2 Dining space

2.2.3 Public bath space

2.2.4 Public toilet space

3. Introduction Of The Environment In Qinghai Province

3.1 Introduction of Qinghai province and population

3.1.1 Geographical

3.1.2 The population structure

3.1.3 Tibetan people in Qinghai

3.1.4 The religious

4. Planning of Qinghai full-age composite religious elderly people care community

4.1 difficulties in the development of Qinghai pension community

- 4.1.1. Transformation of pension mode*
- 4.1.2. Limitation of regional location selection*
- 4.1.3. Limitations of development mode*
- 4.1.4. Single served population*
- 4.1.5. Unsound functional service system*
- 4.1.6. Chaotic planning index system*

4.2 Analysis of influencing factors for the construction of the old-age care area in Qinghai

- 4.2.1. Influencing factors of construction mode*
- 4.2.2. Influencing factors of development mode*
- 4.2.3. Influencing factors of service population*
- 4.2.4. Influencing factors of functional service system*

4.3 Establishment the concept of Qinghai full-age composite religious old-age care community

- 4.3.1 Development mode*
- 4.3.2 Analysis of service system*

PART II

Background

Site Analysis

Concept Build

PART III

The Project

PART I

1. Pension situation in China

1.1 Definition Of Aging Population

China's labor law sets the age of the elderly population at 60, which is different from the world health organization's age limit of 65 and above. According to China's standards, the number of elderly people over 60 years old has exceeded 230 million in 2016, accounting for 16.7% of the total population. It is expected that by 2020, the number of people aged 60 or above will increase to about 255 million, accounting for 17.8% of the total population. According to international standards, an aging society is one in which the elderly population over 60 years old accounts for more than 10% of the total population. China's aging society has become a very serious problem. With the accelerating aging process, China has become the country with the largest aging population in the world.

(Yue Bo, 2017)

1.2 Aging Trend Of China's Population

The 21st century is an age of aging. The general international view is that when the population aged 60 and above accounts for 10% of the total population in a country or region, or the population aged 65 and above accounts for 7% of the total population, it means that the country or region has entered an aging society. According to the above criteria, China entered the aging society in 1999 and is one of the developing countries that entered the aging society earlier. At present, the proportion of people aged 65 or above in China has reached nearly 10%. According to the prediction of the 2013 China human development report, by 2030, the proportion of people aged 65 or above in China's total population will increase to 18.2%. The problem of population aging is related to the long-term development of China's future economy and society. It is necessary to make an in-depth analysis of the current trend of population aging and its possible impact, so as to timely adjust the corresponding policies and measures to deal with it.

(Yue Bo, 2017)

1.2.1 Causes of China's aging population

On the face of it, the reasons for the ageing of the population are relatively simple. However, affected by the objective factors of social development, different countries or regions have different backgrounds of population aging. The aging process of China's population is affected by both the general factors of population transition and the special factors of family planning.

Theoretically speaking, population transition refers to the process in which the reproduction type of population gradually changes from high birth rate and high death rate to low birth rate and low death rate in the process of modernization. Generally speaking, according to the different levels of birth rate and death rate, the population transformation can be divided into three different stages: the first stage is characterized by high birth rate, high death rate and low population growth rate; The second stage is high birth rate, low death rate and high population growth rate. The third stage is low birth rate, low death rate and low population growth rate. According to most research results at home and abroad, the starting point of population transition is generally the high equilibrium stage, and the end point is the low equilibrium stage. It can be simply understood that when the population transition enters the low equilibrium stage, it indicates that the population transition is basically completed, and the age structure of the population also begins to enter the aging stage. According to international practice, 2003 can be regarded as the inflection point of China's population mortality rate change. Considering the two criteria of "natural growth rate standard" and "death rate inflection point standard", China has completed the demographic transition in 2006.

If there is no family planning policy, the process of population transformation in China may last longer, which will lead to a slower process of population aging. Throughout China's economic and social development, the reason for the acceleration of China's population aging process lies in two aspects of "double-whammy effect", on the one hand, the family planning policy implemented by the government accelerates the reduction of fertility rate, on the other hand, the family planning policy changes brought about by economic and social development. Since the implementation of China's family planning policy in the late 1970s, through more than 30 years of continuous publicity and education, supplemented by corresponding economic means and certain administrative means, the family planning policy has achieved good results, and the initial estimate is that China has lost about 400 million people affected by the policy. The international community generally believes that China is one of the countries in the world with a very significant decline in fertility, and has completed the transformation from a typical country with a high birth rate to a country with a low birth rate, which fully shows that the family planning policy has played a very important role in the process of China's demographic change.

(Fu Rao, 2018)

1.2.2 Current situation of China's aging population

China is a developing country that entered into the aging society earlier. Compared with other western developed countries, China's aging population has different characteristics:

1.2.2.1 Large elderly population base

In 2014, China's elderly population aged 60 and above reached 212 million, accounting for 15.5% of the total population. According to the current development trend, it can be predicted that by the middle of this century, China's elderly population aged 60 and above may reach 450 million to 470 million, which depends on the birth rate in the future, including the adjustment of fertility policy. In addition, there are still a large number of disabled and semi-disabled elderly in China.

1.2.2.2 Rapid aging of population

This is mainly reflected in two aspects: on the one hand, "getting old before getting rich"; on the other hand, the rapid growth of aging. When the population of developed countries is aging, the level of economic development is already relatively high, with a sound social security system. In addition, the aging rate of the population in these countries is also relatively slow, with a period of decades or even hundreds of years. And this is a good preparation for the aging of the population, for them to be able to cope with the aging of the population. When China entered the age of population, the level of economic development was not high. In 1999, when China entered the aging society, its per capita GDP was only about us \$1,000, while developed countries entered the aging stage when their per capita GDP reached us \$5,000-10,000. Moreover, our country will experience a rapid aging rate in the future. From 2000 to 2010, the proportion of China's elderly population increased by 3 percentage points. In the 40 years after 2010, the proportion of the elderly population will increase by 4.7, 8.0, 5.2 and 5.3 percentage points per decade, respectively. By 2030, China's aging level will be the same as that of Germany in 2010, and by 2040, China's aging level will be the same as that of Japan in 2010.

1.2.2.3 Uneven aging process

There are three unbalanced aspects: 1. The proportion of the elderly population in rural areas is higher than that in urban areas. The proportion of the elderly population in rural areas is 15.6 percent, 4.7 percentage points higher than that in urban areas. 2. The eastern region is faster than the western region. Shanghai is the first region in China to enter the aging society. However, the entire western region did not enter the aging society until 2012. According to household registration, the aging level in Shanghai has reached 27%, while western regions such as Tibet and Xinjiang have not entered the aging society. Third, the structure is unbalanced. 3. China's born population has great ups and downs. The imbalance of population age structure is quite prominent. Since the founding of new China, there have been three baby booms, the first from 1950 to 1957, the second from 1962 to 1972, and the third from 1981 to 1990.

1.2.2.4 The response to ageing is inadequate

First, the system is ill-prepared. China's pension policy system is at the initial stage of establishment and improvement. In recent years, China has revised the law on the protection of rights and interests of the elderly. There are more than 200 regulatory documents issued by departments and regions, but there are still gaps in some fields. Social endowment insurance is a most basic safeguard measure, according to current collect pay and expenditure level, with the consider owe cost, plan as a whole, the problem of the respect such as management, local area exists to close the risk that does not offset. China's pension and nursing staff work income is relatively low, the professional identity is poor, and due to the standardization of training has not been widely promoted, the gap between talent supply and demand is relatively large. At the same time, pension institutions management talent is also relatively lack of experience. Finally, the facilities are poorly prepared. In 2014, there were only 26 beds for every thousand elderly in China, compared with 50-70 beds in developed countries, and some of them were non-nursing beds in community care centers.

(Chen Bin, 2016)

1.2.3 The trend of China's aging population

According to the changes of China's population age structure and the possible adjustment of fertility policy, it is predicted that by the end of the 21st century, China's aging population will experience four stages: rapid development, rapid development, slow development and high stability.

1.2.3.1 Rapid development stage (2015-2021)

From 2015 to 2021, China's population is in the stage of mild aging. At this stage, the elderly population in China has reached its first growth peak, reaching 258 million. This stage of the increase of the elderly population belongs to the "born between 1950 and 1960", their ideas, income level, lifestyle is different from the "born between 1930 and 1950", not only the consumption ability, and only a small number of people catch up with the family planning, most have three or more children. These children are the main source of economic supplement for the "born between 1950 and 1960" elderly, but these children are the backbone of the society at present and are unlikely to provide family pension services for their parents. However, they are an important customer group for the development of aging finance. This stage is the golden strategic preparatory period for the development of China's aging industry.

1.2.3.2 Rapid development stage (2022-2030)

From 2022 to 2030, China's elderly population will usher in the second growth peak, which is also the largest growth of the elderly population in the 21st century, from 258 million to 371 million people. The aging level will reach 20.3% in 2024, beginning to transition to the stage of moderate aging. By 2023, the elderly population will exceed the young population, marking China's transition from the era of mainly raising children to the era of mainly raising the elderly. This stage of the elderly population is mainly "born between 1960 and 1970". This group of people experienced strict family planning, the number of children sharply reduced, urban elderly couples on average less than one child, rural elderly couples on average only about two children. These people have open minds, modern lifestyles and strong economic strength.

1.2.3.3 Slow development stage (2031-2053)

From 2031 to 2053, China's population has entered the stage of moderate aging. In this stage, China's total population entered the negative growth stage, the total population began to reduce, the elderly population growth slowed down, from 371 million people to 487 million people. Most of the elderly population increased in this stage is the "born between 1970 and 1980" generation. Many of them have huge aging financial assets and will be the direct and indirect consumers of the aging industry. In this stage, China's aging industry development into a mature period.

1.2.3.4 High stability stage (2053-2100)

The period from 2053 to 2100 is a period of high and stable development. In this period, China's population continues to be in a severe aging stage. At the end of the aging population growth period, the number of elderly people decreased from 487 million to 383 million. The aging level of the population remained stable at about 1/3, running at a high level, forming a stable platform for severe aging.

(Chen Bin, 2016)

1.3 Characteristics And Behavioral Patterns Of The Elderly In China

The so-called "elderly characteristics" refers to a special state of the elderly, which is mainly manifested in their physical, psychological, behavioral and other aspects. Only through in-depth understanding of the special physiological and psychological characteristics, behavioral characteristics and living habits of the elderly can comprehensive, reasonable and targeted design and research be conducted to provide the elderly with a safe, healthy and comfortable living space environment and safeguard the rights of the elderly.

1.3.1 Physiological characteristics of the elderly

With the increase of age, the function of various tissues and organs in the body gradually declines, including the decline of vision, memory, slow taste and smell, and decreased coordination of movements. It can be analyzed from three aspects: sensory system, musculoskeletal system and thinking system.

1. In terms of perception system, according to the research on sense-perception characteristics of the elderly, it is found that the structure and function of each sensory perception system of the elderly aged over 60 years old have degenerative changes, especially the gradual appearance of visual and auditory impairment, which affects the reception of information to the surrounding environment.
2. Musculoskeletal system: due to the decline of internal organ function and the atrophy of muscles, the muscle strength of the 70-year-old is only half of that of the 30-year-old, leading to the inability of the elderly to bear drastic strenuous exercise.
- 3, the thinking system, the elderly brain cells began to reduce, brain tissue began to atrophy, nerve conduction speed is also significantly reduced when young, resulting in the elderly generally slow movement, instability, movement disorders, poor response to the action characteristics. In addition, the cognitive abilities of older adults change significantly when they are younger, especially when attention and memory deficits are present.

(Shi Jun, 2016)

1.3.2 Psychological characteristics of the elderly

The range of activities of the elderly after retirement is greatly reduced compared with the period of work, and their activity centers are transformed from work units to families and communities. Their social interactions are changed from colleagues to family members and neighbors. Coupled with the impact of physiological changes, their psychological needs are also changed accordingly.

The psychological characteristics of the elderly are manifested in the decline of psychological security, the weakening of adaptability, the sense of loss, inferiority, loneliness and emptiness. Due to the limitations of physiological conditions, such as the decline of short-term memory and the degradation of thinking ability, the elderly have a low ability to accept new things, it takes longer to learn and understand a new thing, the ability to adapt to the social and living environment is weakened, and they are prone to inferiority complex.

Secondly, elderly have special emotional attitudes. After retirement, elderly's social circle becomes narrower and narrower, and their participation in social affairs becomes lower and lower. Therefore, they will feel lonely and empty in spirit, and gradually feel out of touch with The Times.

Due to the degradation of physiological functions, the change of social roles, the lack of family communication, and the change of urban neighborhood, the elderly are prone to loneliness and often feel neglected, hoping to receive the care and recognition of family and society.

1.3.3 Analysis of behavioral characteristics

The characteristics of the daily behaviors of each elderly person are closely related to their living environment, physical conditions, economic conditions, cultural background and hobbies, and are also greatly affected by psychological and physiological conditions.

1.3.3.1 Leisure behavior pattern

1. Regularity and long-term nature

The leisure behavior mode of the elderly is different from that of the young, who have various leisure modes. However, the leisure mode of the elderly is usually in a fixed state, with fixed leisure partners, fixed leisure places and leisure time. The elderly's circle of friends is mainly dominated by neighbors and old partners, and the place of activities is mostly indoor leisure facilities, green gardens, gazebos, open Spaces and other Spaces in the community.

2. Privacy and agglomeration

Most of the elderly are very willing to participate in outdoor activities and have a strong demand for outdoor leisure places. Only a small number of the elderly like to have leisure activities at home or in the indoor activity center.

3. Universalization and personalization

The daily life of the elderly tends to present both common and individual characteristics, and the activities that the elderly like to engage in generally have strong commonality, such as walking, playing chess, playing cards, chatting, shopping and basking and so on. However, the family situation, personnel structure, living habits and personality characteristics of each elderly person also show their individuality.

1.3.3.2 Living behavior pattern

The living habits of the elderly are closely related to their physical function and living environment. According to different activity abilities, the elderly can be divided into two categories: those with independent activity ability and those without independent activity ability. The elderly with independent mobility can move by themselves with the help of armrests, crutches or wheelchairs, and their living activities are rich in content and space, while those who need nursing care are relatively monotonous and have narrow space.

1.3.3.2 Shopping behavior pattern of the elderly

Elderly's age level determines their shopping structural characteristics. In summary, elderly's shopping behavior is practical, habitual, cheap, herd and compensatory.

The biggest difference between the old and the young when they buy products is that they value the quality, reliability and practical value of the products. They are cautious, mature and rational in consumption and pursue practical and convenient.

With the growth of age, the elderly will constantly summarize experience in their long-term life. Once certain products are identified, they will always buy the products, develop the habit of using the products for a long time, and gradually form the fixed consumption behavior of buying the products, that is, habituation.

In addition, as the cognitive ability and thinking ability of the elderly gradually weaken, they cannot correctly identify the purchase risk, and cannot make a decisive purchase judgment, often resulting in the herd consumer psychology and irrational consumer behavior.

However, the cheapness is reflected in the fact that most of the elderly in China have experienced economic difficulties. Generally, when they buy products, they are used to going to many stores for comparison before deciding the object of purchase.

Most elderly cannot realize some consumption behaviors when they are young due to various conditions. When they no longer need to bear children and their economic conditions are improved, they will choose compensatory consumption to meet their past life needs, such as clothing, jewelry and health.

2. Research on the current situation of nursing homes

Family endowment has been main endowment patterns of our country, but with the implementation of China's one-child policy, most families to raise a children only, to the present stage, our country has formed a large number of the 4-2-1 (four elderly people, two young people, a child) family, that is to say, in the future life of one-child families to take care of four and eight elderly, this virtually increases the burden of the family pension, the traditional family endowment function is weakened. In addition, because the need of work will lead to the flow of population, many only children can not take care of the elderly, "the traditional family pension model is facing great challenges, the burden of home care is further increased. At present, the single pension way is far from meeting the needs of the elderly population. Faced with this situation, the development of nursing homes is urgent.

At present, the country also has relevant policies to support pension problems. "For on taxes, the government and enterprises and institutions, social organizations and individuals, such as social forces invested welfare, non-profit elderly services, enterprise income tax shall be levied a suspension, and the elderly service for real estate, land, transport property tax, urban land use tax, vehicle usage" and "for the enterprises and institutions, social organizations and individuals, such as social forces, through a non-profit community organizations and government departments to welfare, non-profit donations, elderly services in enterprise income tax and personal income tax before closing on the full deduction", etc.

2.1 Types of nursing homes in China

At present, many nursing homes have been built in China, but many of them have not played their due role. According to the statistical data, by 2011, the number of beds for the elderly in China was 19 per thousand. "the total number of beds for the elderly in China only accounts for 18% of the elderly population, lower than 5% ~ 7% in developed countries and 2% ~ 3% in some developing countries. According to the 12th five-year plan, there are 30 beds for every 1000 elderly people, and more than 3.4 million beds need to be added. It can be seen that China's nursing homes have great development prospects, but in fact, the level of development of China's nursing homes is very uneven, some are hard to get a ticket, usually called public nursing homes, but also uninhabited, that is, private nursing homes, this is China's existing nursing home model.

2.1.1. Public nursing homes

Public nursing homes are also funded and operated by the state, and there are two types of nursing homes. Not all public nursing homes are excellent. One is the star nursing home, as the name implies this kind of public nursing home is the best nursing home. It will exist in second-tier cities in China, which is hard to get. The first social welfare institution in Beijing is a typical example. Its main recipients are entitled to special care from the state, the elderly in need of care, the retired and returned overseas Chinese. Therefore, such nursing homes can exist in China but cannot be widely promoted, so they cannot be popularized. The other is the general type of public nursing homes, although it is also public, but compared with the star nursing home is far away. This nursing home often exist in our country under the three cities, because these grassroots government fiscal deficiencies and the province system unable to absorb funds restriction causes cannot energetically input to the nursing home, the nursing home care staff also lack the sense of responsibility, ignore the care for the elderly, therefore provide quality of service is low, in the long run, the nursing home is unable to continue.

2.1.2 Private nursing homes

Private nursing homes are also private nursing homes, also divided into two cases. One is for low-income people, private nursing homes are for profit, it will provide the corresponding service according to the cost, so in this case, it can be imagined that the service provided; The other is for high earners, who receive enterprise retirees or the elderly whose children are successful, etc. The service quality of this nursing home is very good, high-end luxury, which is the product of complete market economy.

2.1.3 Private construction and public assistance

Private but public assistance means that private capital is invested to build nursing homes and equipped with national standard facilities. At the same time, the state provides certain subsidies to the elderly who enter nursing homes. These subsidies are directly subsidized to the financial affairs of private institutions according to the population. "In addition to the one-time construction subsidies for new or expanded private homes for the elderly, we also provide bed subsidies." However, such supervision will also lead to some problems. Poor supervision will breed corruption. Therefore, such private public assisted nursing homes ultimately depend on whether the grass-roots government has put in place supervision and timely subsidies.

2.1.4 Public construction and private management

Public construction and private management refer to the state's financial investment in the establishment of nursing homes, equipped with corresponding facilities, but the operation and management of nursing homes please private teams, such as nursing workers, doctors, managers, etc., that is to say, the management right of such nursing homes is separated from the ownership, the ownership belongs to the government, and the management right belongs to the private team. For Chinese nursing homes at the present stage, this is the most worthy of praise: on the one hand, the public reduced the burden of the civil team, no early cost investment, which is beneficial to the civil team and harmless; On the other hand, the operation of the civil team solves the problems of the elderly care team itself caused by the traditional mechanism in the public project. The civil team has professional nursing personnel with a high sense of

responsibility, so the service quality is high. In terms of the use of private groups, the government only needs to examine whether the private groups are qualified to run the public nursing home, so as to reduce each other's burden.

For public private nursing home the government only need to establish an evaluation system, including the various indicators, for example, the elderly's physical health, mental health status, hardware maintenance, sanitation, etc, by the end of each year, passing the examination once the government is drawn from the nursing home business lines every year proportion to give private teams, such folk team is through the rental service quality to get benefits, and the government also by buying folk team services improving the quality of their public service, avoid the waste serious caused by the government itself to provide public services, low efficiency and so on. This nursing home model combines the public welfare that the government wants to achieve with the profit-making that private institutions pursue.

(Wang Xiaoyu, 2015)

2.2 Research on the space of Chinese nursing homes

Good adaptability of space is mainly reflected in three aspects of space practicality, high efficiency and humanization, which include: perfect layout, integrity of functional composition, reasonable area ratio, unobstructed and convenient streamline design, and detailed design of space environment.

Perfect and effective layout and correct streamline design can reduce the moving distance of the elderly and the moving line of nursing staff to the greatest extent, save time and improve the timeliness; The perfect functions can meet the physiological, activity and nursing needs of the elderly in various levels and the whole life cycle.

Specific use and the actual space of applicable people often in correspondence with the original definition is not completely and space, such as many elderly in his own bedroom room for eating behavior, designed to exercise the function of the original buildings are often as part of the rehabilitative training room, the original used to broadcast the film and television show room, multi-function room also tend to have the function of the chess in your spare time; Nursing home elderly has particularity, often choose their own familiar and the nearest Spaces in order to meet the demand of its own activity, therefore, should not be overly constrained on the use of space, to grasp the principle of flexibility, in the concrete analysis of the elderly's life habits and activities after demand, targeted arrangement for activities of the corresponding service facilities.

At the beginning of the design of facilities for the nursing home, a certain amount of flexible space should be reserved for different functional rooms, so as to provide the possibility of improvement and expansion for the future development of the function of the nursing home in terms of space environment, as well as to create convenience for the nursing home to expand its operation scale and improve its service quality.

(Wang Xiaoyu, 2015)

2.2.1. Living room for the elderly

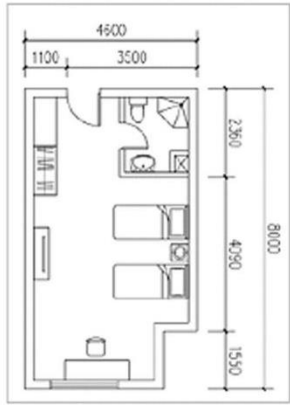

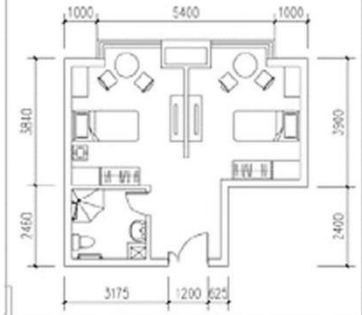

The elderly living room is in the elderly daily life, the time is the longest, the highest frequency of use space; The elderly bedroom is not only a place for sleep and rest, but also part of the daily living functions. Reading, writing, watching TV, chatting, eating and a series of relatively rich activities will occur in the bedroom space. Therefore, the difference design of the elderly bedroom is the priority among priorities of this design.

2.2.1.1 Model

There are many kinds of model of elderly people's bedroom, mainly can be divided into single rooms, double rooms, more human and combination suites and other categories, generally based on oneself the elderly's degree combined with living will, check the number of people from less to more, in turn, increasing, the degree of self-care poor live in elderly, facilitate the care team to take care of people at the same time, reduced the work line, promote efficiency of care. At the same time, it is also clearly pointed out in the building design code for pension facilities that the number of beds in the room of the nursing home should not be more than 6. The number of beds in each nursing home should not be more than 4; The number of beds in each bedroom of senile of lose wisdom should not be more than 4 beds, appropriate undertakes space. [

(Ministry of construction of the People's Republic of China, GB50867-2013.)

Doubleroom plan

Common Plan	Functional distribution	Feature
		<ol style="list-style-type: none"> 1. The most common double room layout is suitable for semi-self-care. Old people can take care of each other. 2. Beds in the bedroom area are adjacent and privacy measures should be taken. 3. The living area is equipped with a desk or a shelf to facilitate the elderly to eat in the living room.
		<ol style="list-style-type: none"> 1. Bedroom separation, suitable for self-care for the elderly, to ensure the privacy of the elderly to the greatest extent possible. 2. Two separate and independent activity areas can be arranged according to different living habits of the elderly.

(1) Double room

In general, the main groups of double rooms are self-care elderly, semi-self-care and light assisted elderly; The elderly that takes care of oneself completely has better behavior activity ability, domain consciousness is opposite also clear, should open up independent bedroom area and activity area for its inside the bedroom, satisfy its dimensional demand.

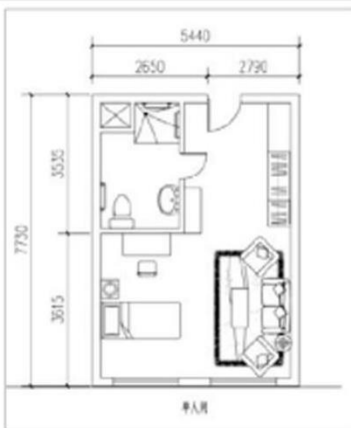



The semi-self-care and light assisted elderly have certain mobility and self-care ability, but their health status is slightly inferior. For safety reasons, the bedroom area can be set up centrally, and soft partition can be used to divide the area and share the activity area of the bedroom. Living in the process can not only chat, eliminate the usual loneliness, but also in an emergency when mutual care; And from the Angle of illicit close sex, also won't suffer too big effect.

(2) Single room

The main group of single room is self-care ability, high privacy requirements of self-care type of elderly or part of the need for special care of nursing elderly; Self-care elderly people can better complete the vast majority of daily activities, space quality requirements high; When decorating normally, give priority to the convenience of all sorts of repose activity of the elderly and the dimensional demand that elderly bedroom receives a visitor.

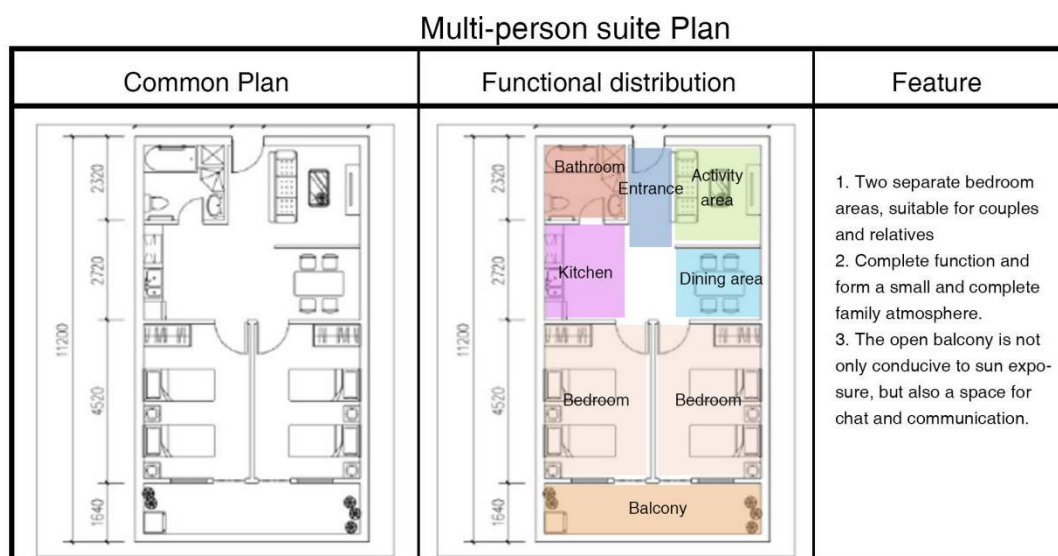
The elderly in nursing care need to provide daily care and medical services for a long time without interruption. Therefore, it is necessary to focus on the efficiency and convenience of various physiological activities of the elderly and the space requirements of the elderly's static recreational activities.

Single Room Plan

Common Plan	Functional distribution	Feature
		<ol style="list-style-type: none"> 1. The regular arrangement of the living room is suitable for self-care for the elderly. 2. Set up the living room in the southeast direction, the space is wide, which can better meet the leisure activities of the elderly.
		<ol style="list-style-type: none"> 1. Adjacent to the bathroom and entrance, the bedroom area is suitable for Needs-to-care elderly people, reducing the distance between the toilet stream and the elderly's outing. 2. Large-area windows open to meet the needs of the elderly.

(3) Multiple suites

Multi-person suite is a type of room that is improved and expanded on the basis of multi-room. Usually, the area of the room is large, and additional separate kitchen space, living space and dining space are equipped in the room. It is suitable for elderly couples and relatives to live together and has a strong family atmosphere and sense of belonging.



(Ministry of construction of the People's Republic of China, GB50867-2013.)

2.2.1.2 Functional composition

The basic space of a complete elderly bedroom is mainly composed of entrance space, bedroom and toilet. In the nursing home with better conditions, the living room, kitchen, dining room and other expansion Spaces are also considered to meet the activity needs of the elderly.

Due to the large difference in the living habits and activities of self-help elderly, semi-help elderly and need-help elderly, when design the rooms should make clear the specific living object of this bedroom, have pertinence to satisfy the dimensional demand of 3 kinds of different elderly. The following will take the most common double rooms in nursing homes as an example to analyze the differences of the three categories of elderly people's use of bedroom space.

(1) Entrance space

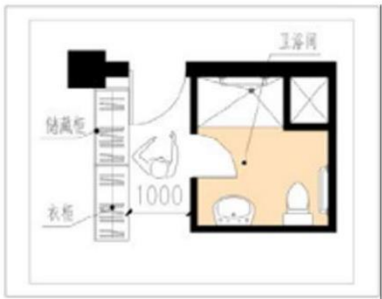

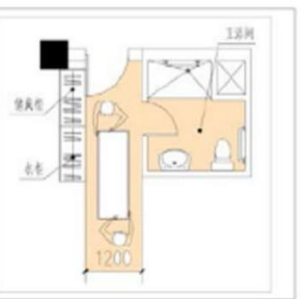
When decorating normally, it is to undertake combination design with the entrance and toilet of the bedroom, because this is in, the selectivity on open the door position is not big; At the entrance, the first consideration is the patency and convenience of the daily passage of the elderly. Considering the difference of the passage of the three categories of elderly, the design of the entrance size will also be different.

The average width of the body size of self-care elderly people who can act independently and step-assist elderly people is between 550-600mm, and usually only the minimum net width of 1m at the entrance is required. For the elderly in the assisted-in-kind wheelchair, the distance between the wall and the door should be at least 400mm, and the minimum net width of the entrance should be at least 1500mm. Type and interface to protect the elderly can't complete mobile process, in the process of moving from one or

several paramedics using the wheelchair to move, beds, complete mobile behavior assumption about nursing staff use goes on the way, the minimum width size should meet at the entrance to the move by beds short side 650 mm - 700 mm with nursing staff and the sum of 500 mm - 550 mm wide, which is 1200 mm above.

(Code for design of buildings for the elderly, JGJ122-99.)

Entrance space requirement analysis

Self-care type elderly	Needs-to-help elderly	Needs-to-care elderly
		
Entrance net width > 1M	Entrance net width > 1.5M	Entrance net width > 2M

(2) Bathroom

When designing in residential suite, normally, there are two kinds of arrangement way to design the bathroom: put it out of the balcony, or to set to be close to inside corridor place. These two kinds of setting way are general practice in residential design; But when the arrangement the bathroom of elderly people's bedroom, we can choose the second way only; Although From the usable area point of view, the two are not very different. But layout outside the bathroom will produce bigger effect to the ventilated, daylighting of the room, at the same time, bedroom space and outside corridor are adjacent directly, noise is bigger, reduce the quality of bedroom space, it cannot satisfy elderly normal use demand.

Self-care type elderly in the space that defend bath main activities include washing, go to the toilet, bathe, etc. The horizontal arm span height of self-care elderly is within the range of 1300-1400mm, and the width is within the range of 650-700mm, generally, it is enough to meet the requirements of the general elderly residential building code in design. The range of toilet seat is 900mm*1200mm and above, and the height is between 400mm and 450mm. A space of 400MM*900MM is reserved in front of the lavatory basin. The shower space is 900mm*1200mm, ensuring that the elderly shower alone or accompanied by a caregiver. And it also can assure prevent slippery bath stool and the dimensional demand that all sorts of things that wash bath place.

For the semi-help elderly with a wheelchair, mainly to meet the convenience of access and enough space between the bathroom. Generally, the horizontal arm span height of the elderly in a wheelchair is between 980-1050mm, and its extension width is between 680-750mm, while the rotation diameter of the elderly in a wheelchair is 1500mm. Should pay attention to when arranging pool of wash one's hands the

mesa height is controlled in 850-900 - mm, width 450 mm, width is greater than the elderly at least wheelchair does not exceed 600 mm deep, at the same time pay attention to the pool of wash one's hands the space set aside at least 350 mm below the type used to guarantee the mobility wheelchair the use of the elderly people. When setting the toilet, it should be noted that the height of the toilet should be controlled between 380-420mm, which is equal to the sitting height of the wheelchair elderly. At the same time, enough space should be given to facilitate the nursing staff to assist the elderly in the movement. However, semi-help elderly people's bath is mainly in the tub. In the shower room, they usually just sit in the bathtub for a simple cleaning by the nursing staff, and the space of 900mm*1200mm should be guaranteed to be used.

The activities of the need-help elderly in the bathroom are usually carried by the nursing staff from the bed to the wheelchair, and then pushed to the bathroom for activities, the whole process requires the nursing staff to accompany. Therefore, the mobile space of wheelchair for the elderly and the service working space of nursing staff should be considered simultaneously in the design. Meanwhile, it is also necessary to take into account that the need-help elderly usually cannot take bath in the living room. As a result, the need-help elderly bathroom can spare the shower space. The length of the wheelchair is 1000-1100mm and the service space of the nursing staff is about 300*300mm. The service space of the toilet seat should be more than 1400mm*900mm.

(Code for design of buildings for the elderly, JGJ122-99.)

(3) Bedroom space

In the bedroom space of the nursing home, facilities such as beds, bedside cabinets, wardrobes and tables are usually arranged. The elderly also can arrange refrigerators, portable storage cabinets and other furniture facilities according to their own needs. In the bedroom space of self-care type elderly, in order to ensure the normal passage of the elderly, the clear width of corridor space should be more than 900mm, and the depth of the table, storage room and wardrobe should be more than 600mm to facilitate the storage of goods; The interval between beds should be more than 600mm to meet the needs of traffic and arrangement.

In the bedroom space of the assisted elderly, the requirements of facilities are similar to that of the self-care elderly. The main difference lies in the need to meet the smooth movement of the elderly wheelchair and the rotary space in the main area of the bedroom. Accordingly, to assure pass, the corridor of the bedroom should be in 1200mm above, the net width between two beds is in 1100mm above, to save a space normally, can use the space that serves as wheelchair gyration between two beds, but from the respect that satisfies elderly activity demand, more incline gyrate space is set in the main activity area of the bedroom.

The space of the elderly's bedroom mainly needs to meet the needs of wheelchair and push bed (bath bed). The size of the manipulator is usually 1850 mm * 650 mm, consider nursing service body, aisle width should guarantee in more than 1200 mm, at the same time in order to considering the repast, relatives to visit the elderly (to be arranged in the direction of the elderly the head of a bed between two bed seats, r etc.) and move by behavior (manipulator 90 degrees to at least 1200 mm) on one side of the corridor, the distance between the two beds should guarantee in more than 1300 mm.

(4) Living room activity area

Usually we think of bedroom space as a place for the elderly to sleep and rest. In the bedroom space of the need-help elderly, because they cannot move, the daily activities, including watching TV, sunning, resting, dining, meeting family members and other activities are basically carried out on the bed. For the self-care type elderly and Semi-help type elderly with good health, the behavior in the bedroom space also includes chatting and communication, reading and writing, walking back and forth, daily physical examination, dining and personal interests and hobbies. Therefore, in the living room space of self-care type elderly and semi-help type elderly, enough activity space should be reserved as the space for the elderly to control themselves. For example, the elderly who love chatting and communication can arrange leisure tables and chairs in this space, and the elderly who have breeding needs can make use of this space to place potted plants.

(5) Balcony space

Since self-care type elderly has some certain self-clean ability, should add a balcony area inside its bedroom space, a balcony can serve as catharsis article air not only bask in area, and can serve as the space of old person daily bask and chat communication.

2.2.2 Dining space

The dining space of the elderly in the nursing home can be divided into three types, including: the dining area of the public dining room, the public living room, and the dining room of the elderly. Among them, the public centralized restaurant is mainly suitable for the elderly who are in good health and self-care, while the public living room dining area is mostly used for semi-self-care elderly and assisted elderly. The elderly with poor physical condition and the elderly without mobility are usually served meals in their living rooms.

The dining area of public dining room and public living room can be attributed to the part of public catering. Therefore, in this section, the dining space in the public centralized dining room and the elderly bedroom will be discussed.

2.2.2.1 Spatial location selection

In the facilities of the nursing home, a public restaurant for the elderly is often set up centrally for all the elderly to have meals. However, in the actual survey, it is found that the main users of public restaurants are still concentrated in self-care and semi-self-care elderly groups. However, the elderly can only have meals in their rooms due to the inconvenience of going upstairs and downstairs and the need for assistance from nursing staff. Also causes prepared meals need nursing staff with cart one by one to each of the elderly's room, on the one hand, increased the nursing work line, reduces the efficiency, on the other hand, due to the delivery of the amount of time spent on the process, the heat and delicious of meal will be on discount, reduce the quality of the elderly have dinner.

It is suggested to set up a separate restaurant in the public living room in the nursing floor of mediating and caring for the elderly. The location of the restaurant is close to the living group. In the design of the overall space, catering and meal sharing space as well as the spatial needs of the nursing staff and some family members to accompany the meals should be considered. In the bedroom that helps in the

introduction, introduce protect an elderly, also should consider the have dinner activity of the elderly adequately, configure enough space in order to satisfy the elderly that has meal activity to undertake inside the bedroom.

Through interviews with the elderly, it is known that many mediators and nurses hope to have meals with other elderly people, expect to get a lively dining environment, and have more opportunities to communicate with the elderly, which can also promote their interpersonal communication and social engagement.

At the same time, when the elderly in this floor of the restaurant, should consider the delivery and residual streamline Settings. Food delivery should be timely carried out by logistics elevators or food elevators to connect the food preparation on each floor to minimize the transportation streamline and ensure the heat and quality of food. In the collection of residual appropriate through the sewage elevator, to sewage treatment between the streamline should also be as far as possible short cut, or in this floor set up in the centralized restaurant dishes, disinfection and other sewage treatment space.

2.2.2.2 Public restaurants

The main users of the public restaurant of the nursing home are the self-care elderly and some semi-self-care elderly in good health, when considering the arrangement, it should be a relatively concentrated large space in the spatial form. At the same time, due to the high frequency of daily use, on the premise of meeting the accessibility of the elderly living on this floor, it should also be arranged near the vertical traffic such as building elevator, so as to facilitate the elderly to arrive.

In the size of the area and the number of layout facilities, mainly based on the number of daily facilities to determine the number of meals; According to the requirements of the "endowment facilities construction design specification", the area 1.5 m^2 / per seat, at the same time the total seats according to 70% of the total beds is calculated.

According to the actual survey found that the majority of the public restaurant users are self-care elderly, design as the above standard area and facilities ratio, the elderly's dining needs can be satisfied. However, in some nursing homes, public restaurants also serve as multi-functional activity places. Therefore, the per capita area ratio of public restaurants with such requirements should be appropriately increased to about 3 m^2 per capita.

(Architectural design data integration 71 special nursing home, 2001)

In the selection of facilities, the public dining room can use a table for 4 or 6 people, the arrangement is mostly determinant. However, in the survey, it was found that some semi-self-care elderly could not eat independently and needed the assistance from nursing staff. Therefore, when arranging the tables, they could also try to put the scattered tables side-by-side to grow tables, which was convenient for nursing staff to focus on meal assistance services. The depth of the dining table should be more than 600MM to ensure that when two elderly wheelchair users are facing each other, their wheelchairs will not touch each other. At the same time, the same side should ensure the distance between each elderly to be more than 800MM to ensure the smooth access of the elderly wheelchair and the assisted elderly. On the choice of eat chair, consider to be taken care of by oneself half model elderly and assist the safe convenience sex in the process that the elderly that help a pace implement is using eat chair, can consider to use revolving type eat chair establishment, convenient elderly sits. On the choice of ark, consider the use that helps type elderly, can use open mode to do not have cupboard door to design, the height that pays attention to setting at the same time, convenient wheelchair and the access that help implement elderly.

The table between the two tables should be greater than 2.1 meters, to ensure that the nursing staff

Dinning meal space and the normal passage of dining car, thickness and the size of the table should also consider the wheelchair the use demand that the elderly, on the choice of eat chair, should choose the one which is relatively strong, and easy to move, at the same time pay attention to the fillet processing facilities, improve the safety of the elderly when using.

Usually the nursing home public restaurant will have nursing staff to deliver meals in place. When the restaurant also adopts the counter way to sell food and the elderly take food by themselves, they should pay attention to ensure that there is a barrier-free service counter to facilitate the elderly to take food.

As a concentrated place for the elderly, the public restaurant is often juxtaposed with the multi-functional hall, projection room and other functional Spaces to achieve efficient use of the space.

2.2.2.3 Dining in the room of the elderly

The self-care type elderly, the semi-help type elderly and the need-help type elderly all have the behavioral characteristics of dining in the room. However, except for the need-help type elderly who lie in bed for a long time, all the other types of elderly can choose their own dining places in their rooms to some extent.

To the old person that can have dinner alone, the place that have dinner can be writing desk, also can be shelving Unit, even still can try to open a special dining space inside the bedroom. Following the light-loving characteristics of the elderly, the original windowsill can be used to extend 300MM space inside and outside to form an object space for placing tableware for the elderly. Considering the elderly with wheelchair, the height of the storage space should be controlled between 850MM and 950MM, and the width should be more than 450MM. After finishing repast, wash tableware also can hold air drying space concurrently.

For the elderly who need assistance with meals, what usually happens is the elderly sitting on the bed or lying on the bed, and the caregivers stand or sit by the bed to assist with feeding. Therefore, there should be enough space between the beds of the elderly to accommodate the nursing staff.

The bedridden elderly who cannot chew normally need more nursing staff and larger space scale of instruments and equipment. Therefore, the net width distance between the two beds should be at least over 1300MM or even wider.

2.2.3 Public bath space

The bath space in the nursing home mainly includes the shower space in the living room of the elderly and the public bath space. The former is mainly aimed at the self-care elderly and some of the semi-help type elderly with good physical conditions. The two types of elderly can generally complete the bath by themselves, or only need a little help from the nursing staff.

However, most of the bathing places of need-help type elderly are completed in the public bath space, and this type of elderly are usually unable to complete the bathing by themselves. They need the assistance of nursing staff from the stage of entering the bath to the stage of leaving the bath, and may even need multiple nursing staff according to their health conditions.

2.2.3.1 Spatial location selection

The layout of the public bathroom space needs to be considered according to the elderly with different health conditions, also can be divide into self-care type or semi-help type elderly bathroom and the need-help type elderly bathroom.

When nursing homes distinguish between self-care and need-help elderly by different floors, in the

self-care floor, the location of the public bathroom is usually set close to the auxiliary service space, which can realize the efficient use of the functional space. Considering that the self-care elderly has strong mobility, they can meet the accessibility in the choice of location. They can be arranged in the corner space on the side of the overall well-ventilated space to enhance the privacy of the space.

For nursing layer, The elderly's health condition is poor, need to have the aid of tools, under the assistance of nursing staff to move to the public bath space, so in the choice of layout, mainly consider the connection with each bedroom space and nursing station space, comprehensive consideration of the service radius of the bathroom space, control the bathroom to the nursing station and the furthest distance to the end of the bedroom.

2.2.3.2 Functional composition

The complete public bathroom contains two aspects in the functional space: basic space and logistics service space. The basic space includes the front room space, dressing room space, bathroom space (including blow-hair wash area) and built-in toilet, which is the space and place for the elderly to complete the process of bath behavior from entry to exit. And service space includes storage area, filth processing area, clean to provide place area, wash clothes area to wait, basically be to complete the space place that washes bath behavior activity and undertakes all sorts of preposition and follow-up work.

(1) Front room space

The front room space is the bathroom area portal, generally has the drapery or the wall stack to have the buffering effect, also often directly with the changing room juxtaposition, avoids the public area line of sight direct to see the bathroom interior through the purchase wardrobe or the corner partition setting; At the same time, there should be benches and handrails on the walls for the elderly to help them when they need to change shoes. At the same time, the level of the ground and sufficient space should be ensured to ensure the smooth passage of wheelchair elderly and bedridden elderly.

(2) Locker room space

Locker room space is the place that the elderly to change clothes, take into account the mobility of protection of the elderly needs, for clothes facilities space contains not only cupboard door closet (use care elderly), and at the same time to arrange the corresponding open type deposit clothes buy object, space and convenient for nursing staff to help the elderly nursing type clothing store; For the wardrobe The layout should also take into account the elderly wheelchair self-storage, storage wardrobe can be set in 0.8 meters - 1.4 meters of the area priority area for the elderly wheelchair.

At the same time, some relevant behaviors of the elderly in this area should be considered, such as wiping the body and daubing protective articles, etc., and the form of seat arrangement should also include the non-slip seat and seat for the elderly, as well as the bath chair, lounge chair and nursing bed for the elderly.

(3) bathroom space

Bathroom space as the most important use space of the main body of the bath space, is the elderly to clean the body, enjoy the bath area. In view of the different health conditions of the elderly different ways of bathing in the bathroom space design should also meet all kinds of elderly bath space needs.

Self-care type elderly : in good health care model more than the elderly to wash bath in the form of standing and sitting position alternately behavior, this kind elderly mobile, but in mobile distance is limited, need to rest, so can be in the bathroom is decorated size is suitable for carrying the table step and help the armrest, so that the elderly help at any time, in the process of in and out of the bathroom space form a loop, ensure smooth flow line. Time kind elderly give priority to with shower bath way more, in the process of shower will be accompanied by a standing and sitting position alternately, to be near the shower decorate antiskid visitors or maybe, at the same time, considering the elderly of the difference of physical activities between ability to shower and toiletries placed on grounds of appropriate USES height adjustable, easy to use the elderly.

Needs-to-help elderly : those in poor health usually take a bath by sitting in a sitting position throughout the whole journey. This type of elderly cannot walk and can only move by means of wheelchairs, bath chairs and other means of transportation. In the bathroom space design should guarantee the leveling of the ground, the biggest difference is not more than 20 mm, bathroom door, the minimum width should not be less than 800 mm, turning radius set aside enough space at the same time, to ensure that the wheelchair elderly in and out of the unobstructed. It should be noted that this kind of elderly in the process of changing clothes to the bathroom will produce transport tool conversion behavior, this kind of transfer behavior in the process of high risk, so in the space should be specially designed. First of all, it should be ensured that the transfer place has support or support for the elderly support, stand briefly, then should leave at least two or more nursing staff side standing space, to ensure the safety of operation. In the layout of bath facilities, considering the specific use of the elderly, should be as far as possible to the auxiliary bathtub long side by the wall layout, at the same time in the entry side set up a table, on the wall along the wall suitable height set handrails, in order to facilitate the elderly in and out of the bathtub. The nursing home with better conditions can also set up a rising and falling bathtub. By adjusting the height of the sitting surface, the comfort and safety of the elderly in and out of the bathtub can be improved.

Needs-to-care elderly : to such bedridden elderly character, undertake commonly whole body is wiped and lie bath. Bedridden elderly do not have the ability to move, the entire need for nursing staff with the help of chaise, bath chair, bath bed and other tools to travel. In the process of transport at the pass, should leave enough space, such as the width was appropriate in 1000 mm above, in order to satisfy the turning radius in the beds to circle the diameter at least more than 2500 mm in satisfying to space requirements.

Similar to elderly in wheel chairs, transfer behavior also occurs in the bath process of bedridden elderly, and the difficulty is greater than the former. When moving, should assure original bed 3 face empty, when elderly head relies on a wall, bath bed or bath chair are close to original bed, nurse personnel can send force in two side, help elderly undertakes moving by. In the choice of facilities, the general use of transfer bath bed for cleaning, on the one hand can reduce the risk of the elderly again transfer dangerous, then can greatly reduce the cost of bath. Bath bed placed right way should be to elderly on both sides of the head and torso part of the airport, convenient for nursing staff to a comprehensive range of cleaning, the elderly at the same time should pay attention to the nearest placed nozzle and floor drain, through a hose nozzle flow to cover the elderly body parts, also can make water discharge quickly, avoid to form water, the ground skid, dangerous. The nursing homes which have a good condition can introduce mechanical bathtub, from the elderly in and out of the safety of the bathtub and nursing personnel operation

convenience, appropriate to use "after send type" bathtub 18, in the layout, should pay attention to reserve good enough space area, also pay attention to three empty, convenient nursing staff to help bath in all directions.

(4) Toilet

For nursing elderly in nursing homes, the public bathroom should be more equipped with bathroom area, to solve the elderly difficult to control the incontinence problem; According to the scale size of public bathroom, large bathroom can be set alone, small scale can be directly in the bathroom one side or two wall space layout sit implement, with drape to try keep out can, space size should ensure should wheelchair elderly minimum rotation space and nursing staff for transfer by service space.

To the choice appropriate of appliance establishment USES intelligence model to sit implement, in order to improve the convenient sex that the elderly goes to the lavatory behavior and comfortable sex, should be in at the same time the setting of the anti-slip mat that notices this area ground and anti-slip brick, and the setting of metope armrest and wall chair.

2.2.4 Public toilet space

Public toilet space is the place where the elderly goes to the toilet outside the bedroom. It also serves as a toilet space for nursing staff and social outsiders. In terms of the way of use, it has a certain degree of commonality. Therefore, in the design, it is necessary to comprehensively consider the space use requirements of multiple parties.

2.2.4.1 Spatial location selection

The space layout of public toilet is the most important consideration of the elderly activity radius. The elderly in nursing care are restricted by their physical health, and their behavior of going to the toilet usually occurs in the living room or public bathroom space. Therefore, self-care type elderly, semi-self-care type elderly and assisted by the elderly is the use of public toilet main body, taking into account the difference in the ability to act and the scope of activities, so the choice of layout to give priority to meet the accessibility requirements of assisted by the elderly can be.

On the space arrangement, usually the public toilet every 50 meters for arrangement, that is, the service radius of a single toilet in 25 meters or so can meet the needs, such as the number of the floor of the intermediary type of elderly more can be considered additional. At the same time, considering the elderly daily space stay ratio, should be the public toilet near the elderly more concentrated place for the layout of activities, can be the maximum limit of the elderly to shorten the moving line of the toilet.

2.2.4.2 Function composition

The function composition of public toilet is relatively simple, which is mainly consists of the front room place and the toilet space. Among them, the leading space belongs to the guiding space, which mainly plays the role of dividing men and women. And wash one's hands and face area and defecate area are the space place that the elderly completes defecate, wipe or clean one's body, wash one's hands and face wait for a series of to use toilet behavior.

(1) Front room space

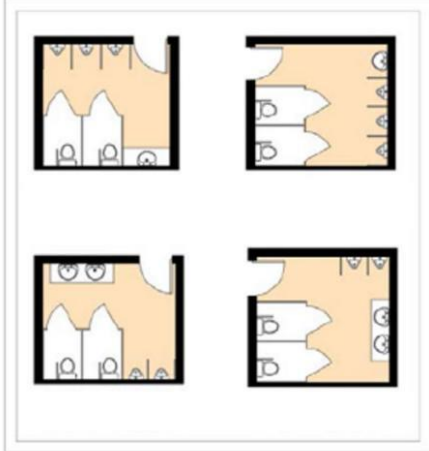
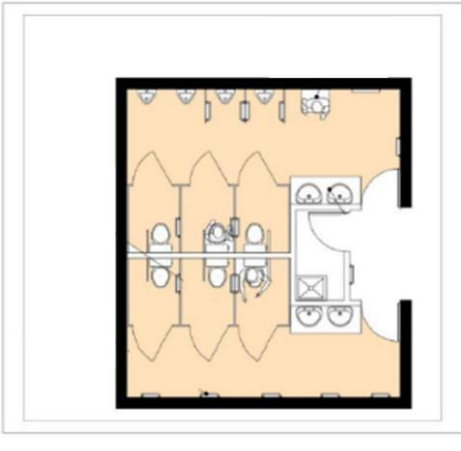
The public health leading space mainly includes the passage type and the front room type. Considering the convenience of wheelchair access, the front room type is advocated in the public restrooms of nursing homes. At the same time, the wall chair and armrest can be set appropriately on the wall to facilitate the elderly to have a rest while waiting for the toilet. At the same time, the level of the ground and the space size should be ensured to ensure the smooth passage of the elderly wheelchair.

(2) Toilet space

Toilet space as the main use space of public toilet space, usually the activities of the elderly in the toilet space mainly include: washing hands and cleaning, excretion, drainage, mainly including the behavior of defecation, wipe, wash one's hands and face and so on. There is a significant difference between self-care elderly and assisted elderly in the way of going to the toilet, which is reflected in the different needs of toilet space in space places.

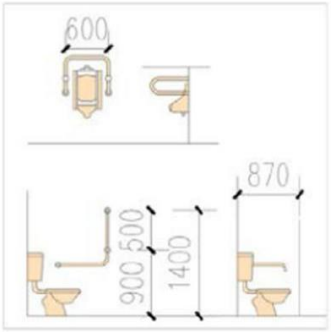
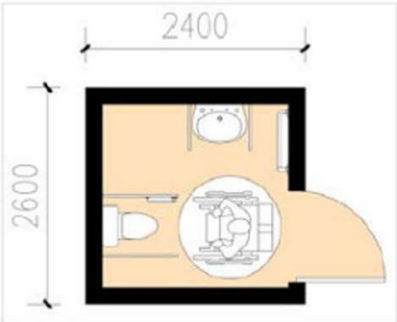
For self-care type, semi-help type: The elderly with good physical condition and the elderly with semi-self-care walker and crutch can move by themselves and complete the complete toilet flow, but the elderly can not move at a long distance and continue to exert power for a long time. Therefore, the layout of defecation area and toilet area should be considered to shorten the movement line in the toilet space of the elderly as far as possible. In the toilet space, the walking armrest is arranged on the moving path of the elderly, and the armrest is arranged on the wall for the elderly to help. The elderly is in go to the lavatory the behavior that appears in the process wipes clean will bring inconvenience for the elderly, on the choice that sit implement can use to take wen shui to clean and the intelligence that dry function sit implement. At the same time, in consideration of walking AIDS or elderly people on crutches in the process of urination and lavatory will appear out of reliance on objects, in the urinal and lavatory pool on both sides should be added anti-skid handrails for the elderly to help.

Entrance space requirement analysis

Self-care type Facility arrangement	Self-care type Space indication
	
Common public bathroom layouts	Pay attention to the walking space inside, the toilet space is provided with handrails for the elderly to help

Nee-of-help type elderly: Elderly people with poor mobility usually use a dedicated and accessible toilet to relieve themselves. Considering the elderly wheelchair rotation and nursing staff service space, the size of the toilet should be guaranteed to be more than 2000*2000mm; At the same time, similar to the bathing behavior, the assisted elderly in the toilet behavior will also appear from the elderly wheelchair to the toilet seat movement behavior, therefore, under the premise of allowing conditions, appropriately expand the size of the toilet, facilitate the nursing staff to assist the elderly to complete the movement, normal toilet. In the choice of facilities and special requirements are similar to the bathroom in the room, but in the layout of the toilet and lavatory, the use process of the elderly should be considered to minimize the movement and rotation of the elderly wheelchair.

Entrance space requirement analysis

Facility requirements	Needs-to-help type Toilet
	
<p>The "L" type handrail is arranged on the wall, and the height is controlled above 1.4M.</p>	<p>Meeting the direction change of the wheelchair elderly</p>

3. Introduction Of The Environment And Elderly Care In Qinghai Province

3.1 Introduction of Qinghai province and population

Qinghai province is one of the most important provinces on the Qinghai-Tibet plateau in China. Qinghai covers an area of 722,300 square kilometers, with a length of more than 1,200 kilometers from east to west and a width of more than 800 kilometers from north to south.

(*Web Baidu encyclopedia*)



(<https://cn.depositphotos.com>)

3.1.1 Geographical

Located in the northeastern part of the Qinghai-Tibet plateau, most of the areas are between 3,000 and 5,000 meters above sea level. With a high altitude in the west and a low altitude in the east, and a high altitude in the northwest and a low altitude in the middle, Qinghai has a complex and diverse terrain, forming a unique plateau continental climate.

(*Web Baidu encyclopedia*)

3.1.1.1 Geographical location

The terrain of the whole province of Qinghai is generally higher in the west, lower in the east, lower in the north and south, higher in the middle, higher in the west, steep in the east, sloping in the east, and descending in the form of ladders. The eastern region is the transition zone from the Qinghai-Tibet plateau to the loess plateau, with complex terrain and diverse landforms. The major mountains form the basic framework of the province's landform. The average altitude of the whole province is more than 3,000 meters, and the area below the altitude of 3,000 meters in the province is 110,000 square kilometers, accounting for 15.9% of the total area of the province. The area from 3000 to 5000 meters

above sea level covers an area of 532,000 square kilometers, accounting for 76.3% of the province's total area. The area above 5,000 meters above sea level covers 54,000 square kilometers, accounting for 7.8 percent of the province's total area. The average altitude of the Qinghai plateau is over 4,000 meters, accounting for more than half of the total area of the province. The Hehuang valley is at a low elevation, about 2000 meters above sea level. The highest point is Bukada plate peak in Kunlun mountain with an altitude of 6,851 meters, and the lowest point is located at the junction of Qinghai province's easternmost point and Gansu province in Haidong citizen and Machangyuan township, with an altitude of 1,644 meters. The landform of Qinghai province is connected with loess plateau and Qinling mountains in the northeast and east, Gansu Hexi corridor in the north, Altun mountain and Tarim basin in Xinjiang in the northwest, Tibetan plateau in the south and Sichuan basin in the southeast. The province's plain area is 197,000 square kilometers, accounting for 28.3% of the province's total area. The mountainous area is 341,000 square kilometers, accounting for 48.9% of the province's total area. The hilly area is 102,000 square kilometers, accounting for 14.6% of the province's total area. The platform covers an area of 57,000 square kilometers, accounting for 8.2 percent of the province's total area.

(Ma Xiu,2018)



(<https://cn.depositphotos.com>)

3.1.1.2 Climate

Qinghai province is located on the Qinghai-Tibet plateau, far from the sea and inland. Its climate characteristic is: insolation time is long, radiation is Strong. Winter is long and summer is cool. The daily temperature range is large and the annual temperature range is small. Less precipitation, big regional differences, more rain in the east, the west is dry and windy, hypoxia, cold. The annual average

temperature is affected by the terrain, and its general distribution pattern is high in the north and low in the south. In Qinghai regional annual average temperature between 5.1 ~ 9.0 °C, January (most of) the average temperature is 17.4 ~ 4.7 °C, the Qilian toler is the coldest region. July (most thermidor) average temperature between 5.8 ~ 20.2 °C, and for the hottest region. The annual average air temperature is below 0 °C of Qilian mountain, the southern plateau area of more than two-thirds of the whole province area, the east of warmer HuangShui, the Yellow River valley, year draw temperature at about 6 ~ 9 °C. The annual precipitation of the whole province is decreasing gradually from southeast to northwest. The annual precipitation of most parts of the territory is below 400 mm, and that of Qilian mountain area is between 410 and 520 mm. The long-term treatment and Bamah area in the southeast are over 600 mm, among which the long-term treatment is the region with the largest precipitation, with the average annual precipitation reaching 745 mm. The annual precipitation of Gaidam basin ranges from 17 mm to 182 mm and is less than 50 mm in the northwest of the basin. Frost - free period is 3 ~ 5 months in the eastern agricultural area, and 1 ~ 2 months in other areas. The total annual solar radiation of the province is second only to that of the Tibet plateau. The average annual solar radiation can reach 5,860 ~ 7,400 megajoules per square meter, and the hours of sunshine are between 2,336 and 3,341 hours. The province is rich in solar energy resources.

(Ma Xiu,2018)



3.1.2 The population structure

The population of Qinghai province reached 5.9838 million in 2018, 49,200 more than in 2017. The urbanization rate reached 53.07%, and the ratio of male to female reached 103.in 2017, the natural growth rate of permanent population in Qinghai province was 8.25‰.[8]

3.1.3 Tibetan people in Qinghai

Tibetans are the largest and most widely distributed ethnic minority group in Qinghai province. They mainly live in Yushu Tibetan autonomous prefecture, Hainan Tibetan autonomous prefecture, Huangnan Tibetan autonomous prefecture, Guoluo Tibetan autonomous prefecture, Haibei Tibetan autonomous

prefecture and Haixi Mongolian Tibetan autonomous prefecture. The Tibetan ethnic group has its own language and script and is rich in cultural heritages. They are mainly engaged in animal husbandry and agriculture and believe in Tibetan Buddhism.[9]

According to the data provided by the fourth national census in 1990, there were 911,860 Tibetans in Qinghai, accounting for 20.46 percent of the total population of Qinghai and 19.85 percent of the total Tibetan population of the whole country. The Haidong, Haixi Mongolian and Tibetan autonomous prefecture and the Ando dialects of Hainan, Haibei and Guoluo Tibetan autonomous prefecture where people live around Qinghai lake are Ando dialects, and the Kangba dialects of Tibetan people in Yushu prefecture belong to Kangba dialects.

Qinghai is a vast territory, the Tibetan geographical environment and engaged in material producers of different objects, ways, in the customs also show many differences. It is mainly between the Tibetan people living in the grasslands and engaged in animal husbandry and the Tibetan people living in the low-altitude areas and engaged in agricultural production. The Tibetan people in Yushu bordering Kangba and the Tibetan people in Ando are connected with each other. The customs are slightly different between the earthen Tibetan in the pastoral area of Yushu and the earthen Tibetan in the agricultural area of Haidong. In view of this, part of the Tibetan customs by the Yushu region and the Ando region is composed of two parts. This is conducive to mutual complementarity, as far as possible to reflect the overall outlook of Qinghai Tibetan customs, but also to reflect their differences and their respective characteristics.



3.1.4 The religious

Qinghai is a multi-ethnic province with a long history and splendid culture. There are now 54 ethnic groups. According to the sixth population census of Qinghai province in 2011, the population of ethnic minorities in Qinghai is 2.6432 million, 46.98% of the total population of 5.6267 million. The proportion of ethnic minorities is only lower than that of Tibet and Xinjiang, and higher than that of Guangxi, Inner Mongolia and Ningxia autonomous regions. The ethnic minorities in Qinghai are mainly Tibetan, hui, tu, Salar and Mongolian, among which Tu and Salar are unique to Qinghai. Among the ethnic minorities, there are 1.37 million Tibetans, accounting for 24.44 percent of the total population. There are 834,200 hui people, accounting for 14.83 percent of the total population. There are 204,400 people of Tu nationality, accounting for 3.63% of the total population. There are 107,000 Salar people, accounting for 1.90% of the total population. There are 99,800 Mongolians, accounting for 1.77% of the total population. Other ethnic minorities numbered 22,500, accounting for 0.40% of the total population.

Our province is also a multi-religious province. Buddhism, Islam, Taoism, Christianity and Catholicism all spread in our province, among which Tibetan Buddhism and Islam have a wide and profound influence among the believers. Several ethnic groups, such as Tibetans, hui, Tu, Salar and Mongolians, are all believers basically. According to the annual survey of sites for religious activities in the province in 2004, there are more than 2,100 sites for religious activities in the province. The province has more than 29,000 religious personnel, accounting for 1.33 percent of the religious population. The province has more than 2 million religious believers, accounting for 41.65 percent of the province's total population.

(World Population, 2019)

In Qinghai, the Tibetan Buddhism each faction all has the devotee, but especially by believes the Gelug sect (also called yellow religion) the number is most. Different from the belief of Chinese Buddhism, one of the characteristics of Tibetan Buddhism is that the whole people believe in religion. On the one hand, the commonality and uniqueness of this religious belief constitute the common value basis for the formation and development of all Tibetan people. On the other hand, it determines the consistency between religious life and secular life in Tibetan Buddhist belief, and it is precisely because of this "consistency" that family religious experience and religious life play an important role in the realization of individual socialization and the inheritance of Tibetan Buddhist culture. In Qinghai province, children of Tibetan, tu and Mongolian families have been influenced by the family religious experience inherited from generation to generation since they can remember things, including the recitation of doctrines and the mastery and observance of the ethical norms of Tibetan Buddhism. Through telling fables, legends and fairy tales handed down from generation to generation, the elders educate their children about national history and customs. Family religious orientation and the family religious experience edify, Canon of yili oral speaking to in worship, festivals, marriage funeral demonstrate a combination of the religious activities such as body, established their own religious identity to offspring, and accept is consistent with the Tibetan Buddhist religious beliefs of various religious rites, rituals, abide by the religious taboos, inherit and spread of Tibetan Buddhism culture, plays an irreplaceable role.

Tibetan Buddhist culture is most obvious and concentrated in Tibetan Buddhist temples. There are many Tibetan Buddhist temples in Qinghai province, such as the tower temple in Huangzhong, the Xiaqiong temple in Hualong, the Gutan temple in Ledu, the Longwu temple in Huangnan, the Muzhu younging temple and the Laga temple in hainan. More importantly, as the carrier of Tibetan Buddhist culture, these monasteries have become necessary and necessary places for believers to express their religious feelings and practice. Every year, a large number of monks pay their respects to the monastery, which has become a cultural and spiritual symbol in the hearts of Tibetan Buddhism believers in Qinghai province.

In addition, temple education, as a kind of academic education, is also an important way to inherit Tibetan Buddhist culture. Compared with family religious education, temple education is more formal and systematic. As the most advanced Tibetan Buddhist college in Qinghai province, Tushi Buddhist college not only preserves a large number of scriptures and books, but also gathers many learned and noble masters. In addition, the temple's strict rules of life and quiet environment make it the best place to preach Buddhism and study. Temple education, as a formal college education, has cultivated a large number of Tibetan Buddhist cultural elites. On the one hand, they shoulder the important task of spreading and developing Tibetan Buddhist culture; on the other hand, they play a role in stabilizing social order in Qinghai and promoting the progress of Tibetan society.

(Dai Yan, 2010)



4. Planning of qinghai full-age composite religious elderly people care community

4.1 difficulties in the development of Qinghai pension community

The limitations and difficulties of the development of Qinghai pension community are shown in the following aspects:

4.1.1. Transformation of pension mode

The current endowment mode of Qinghai province is dominated by nursing homes, care centers and other small pension institutions, and most of the elderly have chosen to provide for the aged at home or even live alone. The utilization rate of endowment facilities is not high, and most of the elderly have zero awareness of community-based pension mode.

The deficiency of experience, the lag of policy making, the lack of normative documents and the low social awareness in the construction of Qinghai province's old-age care community cause the predicament of the transformation of the old-age care mode in Qinghai at the present stage.

4.1.2. Limitation of regional location selection

The terrain of Qinghai province is high in the east and low in the west, with the altitude drop reaching about 5200 meters. Moreover, its landform is dominated by mountains, forming many Sichuan valleys and a large number of hilly terrain.

Medical research shows, the person of long-term highland life, human body function and structure will produce change, especially heart cerebrovascular system. After these people move to lower elevations, there will be a "plateau indications", the symptoms tend to let the elderly is difficult to adapt to, limiting the Qinghai region east of old-age pension and the migration of a warmth-loving creature and low altitude area in Qinghai province are mainly concentrated in the western provincial Xining city, and its action and the area and population density is the largest, the highest rate of urbanization in the region, the region's largest pension pressure, construction and operation of large pension community also has certain difficulty.

At present, the development of urban new area in Qinghai area is mainly concentrated in the branch and Sichuan road, and the terrain environment is relatively complex, which will cause certain difficulties to the spatial organization of the pension community.

4.1.3. Limitations of development mode

The development mode of endowment communities in Qinghai province is currently the government-led, and weak market participation, small-scale community development reduces the success rate of market operation, excessive government intervention also caused the endowment industry marketization development of low degree of freedom, the pension market participation of community construction, also makes the endowment real estate development in Qinghai has been in its infancy.

In addition, the elderly population and dependent population in Qinghai have a low awareness of the pension community

There are certain mistakes in the selection, which also reduce the participation of social groups and individuals in the construction of elderly community.

4.1.4. Single served population

Current pension community projects services for over 60 years old or more crowd retired elderly population, some elderly is a self-care type, Qinghai object basic pension institutions and community service are now a plain elderly, will increase the life of the elderly loneliness, can't again into the diversification of social spheres of life, the lack of humanistic care for older people. However, the construction of full-age community can better integrate the elderly into normal social life and enhance community vitality. However, there are few cases of full-age community in Qinghai at the present stage.

4.1.5. Unsound functional service system

The imperfect public service facilities for the aged, low economic income and the lack of the concept of centralized old-age care in Qinghai have caused the majority of elderly people to choose family old-age care, thus unable to obtain more convenient and convenient services

The efficient and comprehensive service for the aged results in the waste of facilities and service resources to a certain extent.

However, the current pension community lacks of sound service system construction, and cannot provide diversified functional services according to the needs of different elderly people.

4.1.6. Chaotic planning index system

Qinghai high altitude terrain is given priority to with mountain ditch the whole, the climate conditions day and night temperature difference is bigger, make endowment facilities building space design, building design and the spatial layout of endowment community is different from the eastern region, at the same time relevant endowment community planning index system is not sound, qinghai area endowment community planning and construction lack of reference standards.

(Zhu Yiping, 2018)

4.2 Analysis of influencing factors for the construction of the old-age care area in Qinghai

4.2.1. Influencing factors of construction mode

The aging rate in Qinghai is increasing year by year, and the aging problem is serious. 1) elderly population base is big, and a large number of young labor emigration caused family upbringing force is insufficient, the traditional family endowment has been unable to support the current old-age demand; 2) small endowment communities and some institutions endowment operation to the bottleneck, the poor elderly living environment, unable to form systematic and standardized service system and facilities system; 3) Qinghai is a high-altitude area, and the aging population has been unable to adapt to the living environment in the low-altitude area after living on the plateau for a long time, so the aging population in this area can only choose local old-age care; 4) the population distribution and urbanization rate in Qinghai are extremely uneven. The population of Xining and Haidong take up 65% of the whole province, and the urban area takes up 2.6% of the whole province. Moreover, the altitude of Xining and Haidong is the lowest in the whole province, and their population base and urbanization rate are the highest.

Starting from the above four factors, combined with China's "home-based, community-based, and institution-supported" model concept, it is concluded that Qinghai should build a large-scale centralized community model for the future of the aging problem in the province. This model can better replace the traditional family and institutional pension model, and provide a more systematic and standardized service system.

4.2.2. Influencing factors of development mode

Qinghai's current community development model (1) is dominated by the government, the market participation is weak, the increase of a large number of elderly population to bring greater pressure on the government; (2) the current top-down community development model away from the market makes the success rate of community operation is low, at the same time the freedom of community development is also limited; (3) the participation of social groups and individuals is almost zero, the construction and operation of the pension district is relatively closed.

Starting from the above three factors, combined with the experience of the development model of the elderly care community in the United States, it is concluded that the future development model of the elderly care community in Qinghai should be dominated by the market, assisted by the government, and filled by the society and individuals. It not only reduces the pressure of government departments, but also enhances the activity of pension and related industries.

4.2.3. Influencing factors of service population

(1) Qinghai is currently in a period of rapid aging, aging population base of all ages is also gradually forming, when the aging of Qinghai region to a stable period, the population of all ages will form a relatively fixed ratio:

(2) in the traditional pension institutions and pure elderly community, the elderly people living in a relatively independent environment, isolated from their families and outside society, so that the elderly

people can not feel the changes in the external environment, and lost the enthusiasm of life and communication.

(3) the community model of pure aging cannot meet China's fine tradition of "filial piety first", which hinders the emotional exchange between elderly people and their families, and is an unsustainable development model.

Starting from the above three factors, combined with the study of pension community models and relevant cases in various countries, it is concluded that the future population of Qinghai pension community service should be all age groups, from the young children to the elderly. All-age community model is conducive to the establishment of a complete social network, but also more conducive to the construction of a comprehensive and systematic service system.

4.2.4. Influencing factors of functional service system

(1) Qinghai is now on its endowment pattern transformation, the traditional family, institutions and small community endowment mode of service system is highly robust and more chaos, (2) the current pension service system is not targeted, unable to meet the needs of all ages, (3) no retirement community service system based on older people physiological and psychological needs: phase separation (4) community building and service system.

Starting from the above three factors, combined with the study of the pension community models and relevant cases in various countries, it is concluded that the future establishment of Qinghai pension community service system should start from the physiological and psychological needs of the elderly population, establish a comprehensive and systematic service system, and build a multi-functional structure system for different service groups.

4.3 establishment the concept of Qinghai full-age composite religious old-age care community

The main characteristics of this mode are described as "all-age composite religious type" in "all-age composite religious old-age care community".

First, "full age" refers to the elderly community under this mode, whose elderly service objects are defined as the elderly population, including "non-elderly people", "self-care type elderly people", "needs-to-help elderly people" and "needs-to-care elderly people".

Second, "compound" refers to the integration of diversified service system and functional configuration in a hierarchical mode according to the needs of different groups.

Thirdly, the participation of "religion" is due to the strong religious atmosphere and numerous monasteries in Qinghai province. The model that temple participates in management is very appropriate.(FIG. 4.3)

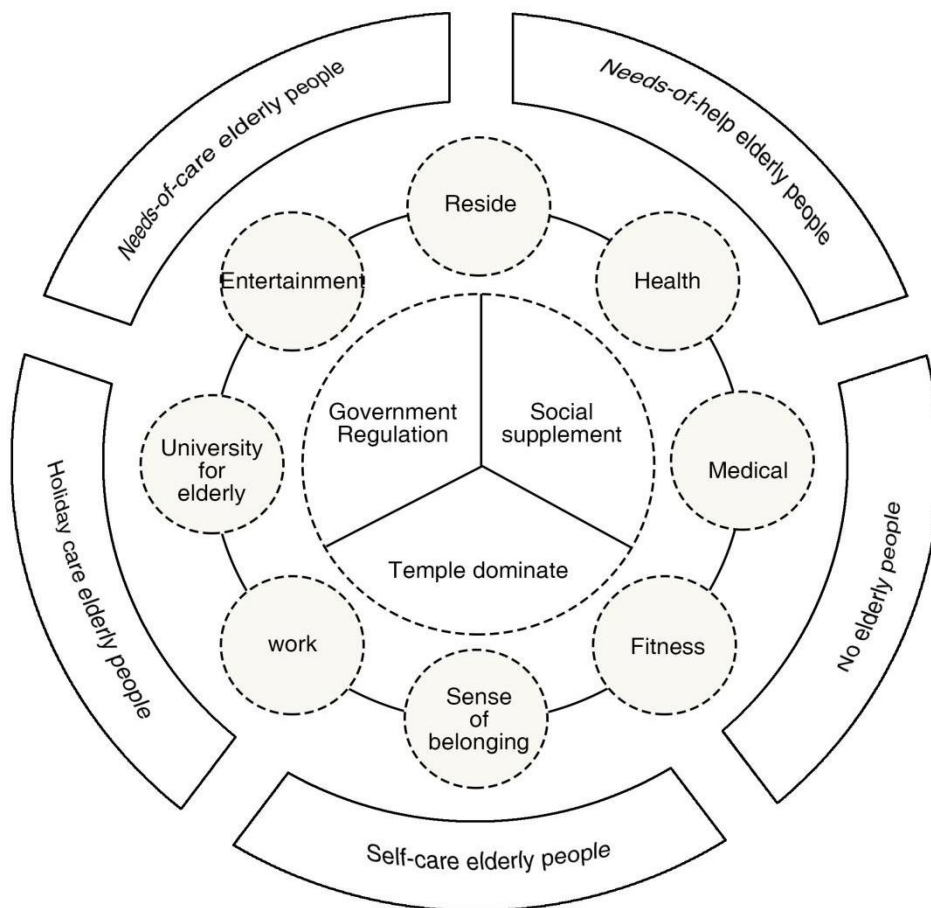


FIG. 4.3

4.3.1 development mode

The full-age compound old-age community relies on temples to build and absorb temple elements. Temples operation as the leading, government regulation as a supplement, social capital as a supplement to the development model. (FIG. 4.3.1)

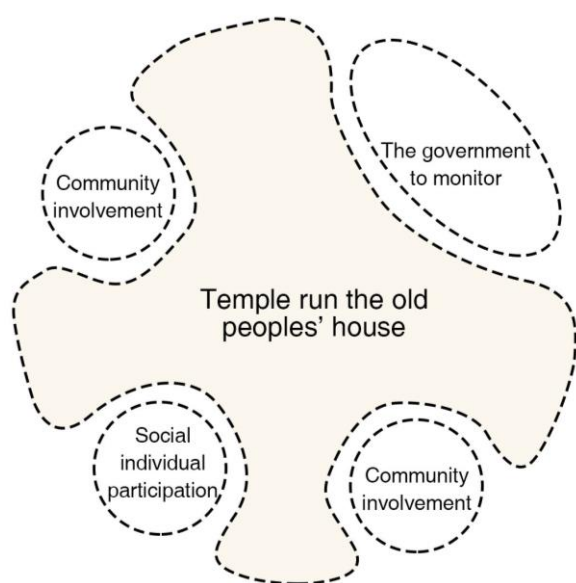


FIG. 4.3.1

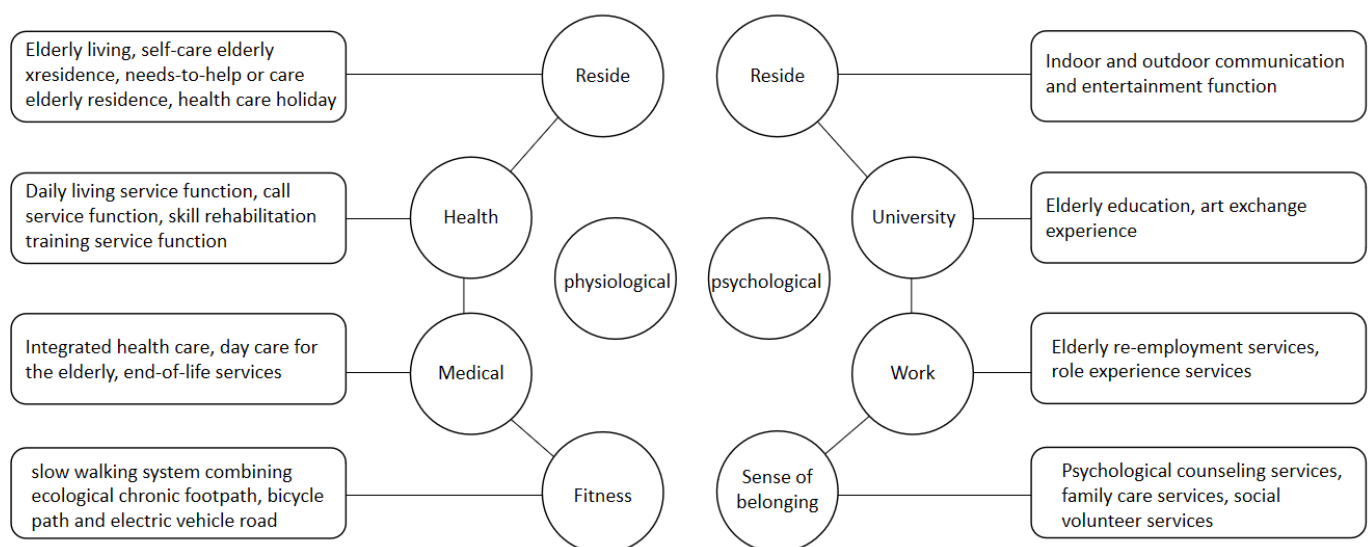
Temple monks and nursing home staff mutual benefit, on the one hand, the temple through the donation can provide a source of funds for the nursing home, the elderly participate in the temple activities conducive to physical and mental health. And the religious atmosphere of the temple can comfort the elderly in their twilight years.

The mode of government regulation is mainly reflected in a certain degree of supervision and guidance. At present, there are many problems in the development of old-age care real estate, such as profit maximization, impure development motivation, financing difficulties, and chaotic experience system, etc. The role of the government is to supervise the development of old-age care real estate, avoid problems and provide correct guidance after problems appear. And provide effective policy assistance.(funding, publicity)

Social capital is mainly reflected in the value links of upstream and downstream industries and parallel industries driven by pension real estate, forming a huge industrial network. Meanwhile, the voluntary behaviors of social groups and individuals are also the embodiment of social capital injection.

4.3.2 analysis of service system

Based on the physiological and psychological needs of the elderly, the full-age compound community service system for the aged can be built, including residence, medical treatment, health maintenance, entertainment, study, work and sense of belonging. Under the basic living conditions, the functional system of service for the aged was implanted from the physiological and psychological aspects.



4.3.2.1. Physiological level: the elderly have shelter, support, medical care and practice

Housing for the elderly: according to different service groups, the residential functions are classified into ordinary elderly residential functions, self-care elderly residential functions, assisted elderly residential functions, nursing elderly residential functions, leisure and vacation functions for the elderly.

Support for the elderly: for the elderly with different health levels, provide basic services in life, divided into daily living service function, call life service function, functional rehabilitation training service function.

Enough security when get old: In the face of the whole community residents set up a medical security, provide a full range of medical, nursing, nursing, rehabilitation, physiological health services are divided into comprehensive health and health care function, self-care aging health care function, mobility aging

day care function, medium armor type old-age care function, service function to end well.

The old can do something: build an ecological slow walking system for the whole community to meet the needs of ordinary residents while providing convenient, safe and healthy travel guarantee for the elderly residents. It is divided into an ecological slow walking path, bicycle path and intelligent tramway combined with the greening landscape system.

4.3.2.2. Psychological level: elderly are happy, elderly are learning, elderly are doing and elderly are returning

To satisfy the communication and entertainment needs of the elderly, reduce the loneliness of the elderly and integrate them into community life. The functions are divided into indoor communication and entertainment functions and outdoor communication and entertainment functions.

Elderly have what they have learned: mainly for self-care type and assisted elderly people, to meet the needs of elderly people to improve their self-value, the function is divided into the elderly education function, art exchange experience function.

The old have something to do: based on the concept of "providing for the aged with elderly care" and experiential service, the paper explores and develops the value of the elderly in the form of service and labor, and divides the functions into re-employment service for the elderly and role experience service.

The elderly benefit: to provide psychological counseling services for the elderly population in the whole community, provide family care for the elderly conditions, advocate social individual voluntary services, and build the elderly housing and outdoor environment suitable for the elderly safety. The functions are divided into psychological counseling service, family care service and social volunteer service.

PART II



Ta' er Lamasery

Standing in an imposing manner according to the gradient of the mountain, the Ta'er Lamasery is a wonderful architectural complex that including scripture halls, Buddha halls, lamas' residences, and Buddhist pagodas. Built in 1622, in the center of the entire complex, the Great Hall of Gold Tiles is the core structure of the lamasery. The ridges of the hall's roof are decorated with auspicious objects such as treasure bottles, gold streamers, and gold deer. In the center of the hall is a silver pagoda built around a papal tree; and a statue of Tsongkhapa, the founder of the Yellow Sect of Tibetan Buddhism, is placed in the pagoda. In the hall there also exists a collection of hundreds of works by Tsongkhapa and his disciples as well as hand-written copies of scriptures in Tibetan and Mongolian.



The architecture of the temple covers the style of han palaces and Tibetan flat-roofed buildings, which form a harmonious and perfect architectural complex combining han and Tibetan art styles.

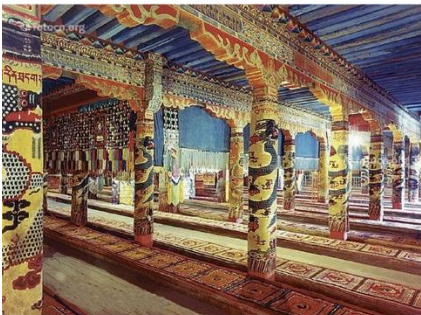


Architecture Analysis

All kinds of building materials in the temple are based on local natural materials, such as soil, wood and stone.



All the surrounding walls, parapets, outer walls and inner walls of the buddhist temple are built with earth rammers or stones. Masonry technology is the use of natural stones, stone pieces masonry wall and wall foundation and other parts. Masonry wall foundation using uniform size of stone, stone used in the foundation and the main support of the wall structure and the joint point, small stone and clay used to adjust the gap and fill the bottom stone.



Wood making technology is also widely used in Tibetan architecture, and it is the part that can best reflect the difficulty of architectural technology and exquisite decoration of details. From the perspective of Tibetan buddhist architectural structure, the timber beam and column system is the core area of the architectural structure, which determines the height and span of the building standing on the ground extending to the three-dimensional space. Specification, size and shape of wooden column and beam.

The exquisite decoration and exquisite craftsmanship of the architecture of the temple are reflected incisively and vividly in the architectural details such as beams, columns, doors and Windows. The door window of tower temple is made with lumber, especially the door window woodcarving craft of buddhist hall.



Han type roof



Tibetan adornment

The doors and Windows of Ta' er Lamasery combine the han nationality's fighting style with the Tibetan rich colors.



Buddhist monastery

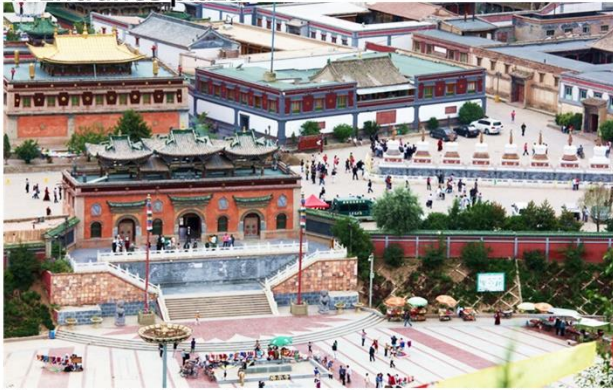


Within view of the site



- ① Entrance plaza
- ② Eight lucky towers
- ③ The bodhi tower
- ④ Qi shou temple
- ⑤ Scriptures print yard
- ⑥ Main assembly hall
- ⑦ Small assembly hall
- ⑧ Scriptures yard
- ⑨ Butter sculpture museum
- ⑩ Scriptures yard
- ⑪ The panchen palace
- ⑫ Clinic
- ⑬ Institute of buddhist

1. Entrance plaza



The combination of han and Tibetan style of gate, There are two squares of difference height.

2. Eight lucky towers



The temple's first group of buildings is the square from east to west in turn distributed in eight white towers, called babao ruyi tower. It is said that the eight towers were built in memory of the eight great merits of Buddha sakyamuni during his lifetime. It was built in 1776. Each tower is almost exactly the same in shape.

3. The bodhi tower



Bodhi and Buddhism have a deep origin, bodhi in Buddhism means consciousness, wisdom, used to refer to people suddenly such as wake up, suddenly enlightened, burst into the path of enlightenment

4. Qi shou temple



"Qi shou" means to pray for a long life.

5. Scriptures print yard



Built in 1827, it is a quadrangle-style building containing many woodcut copies of Tibetan scriptures, which are printed by hand by monks to provide all monks with scriptures on various subjects.

11. The panchen palace



Built on the mountainside of shanxi slope, it is not only the residence of dalai lama and panchen lama, but also the office, as well as the residence of each successive dharma station of the temple. It adopts the han nationality shape system: along a more obvious central axis, forms the left and right

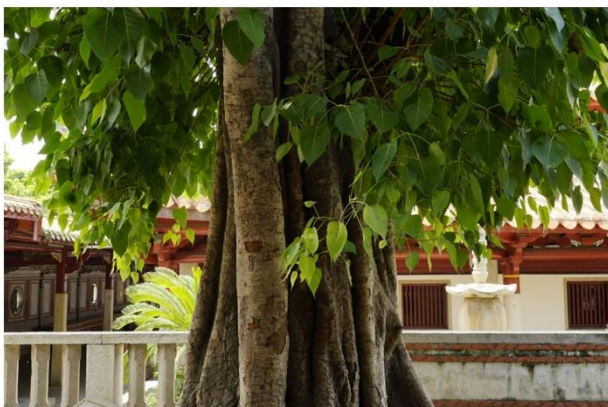
6. Main assembly hall



Main assembly hall, the main building of Ta'er Lamasery, is a Tibetan flat-roofed building, first built in 1606. It is a place where monks in monasteries gather to chant sutras. In the corridor, many believers and monks are kowtowing to the hall, mostly of them are Tibetan who come from afar. They kowtowing from hometown to the temple.



In this courtyard, there is a famous bodhi tree. According to legend, in order to protect this bodhi tree, devout believers have built the great sutra hall and then the tower temple. You can see how much the bodhi tree means to the whole temple.



7. Small assembly hall



Compared with Main assembly hall, Small assembly hall is not so prominent in architecture and status, but it has an important artifact in its courtyard -- the prayer wheel.



The prayer wheel is a buddhist device. It contains Tibetan sutras or mantras, which can be chanted by right rotation. Since most tibetans, especially the elderly, cannot recite sutras fluently, they use prayer wheels instead.

8/10. Scriptures yard



The Scriptures yard is mainly a place for monks to practice, where they learn Tibetan astronomy, calendar knowledge and all kinds of scriptures.

9. Butter sculpture museum



Butter sculpture is one of the "three wonders of art" in the temple. It is made of Butter as raw materials to create a variety of statues, figures, landscapes, pavilions, birds and animals, flowers and trees, and other fine arts.

On the 15th day of the 1st lunar month, a grand buttered flower festival is held every year.

12. Clinic

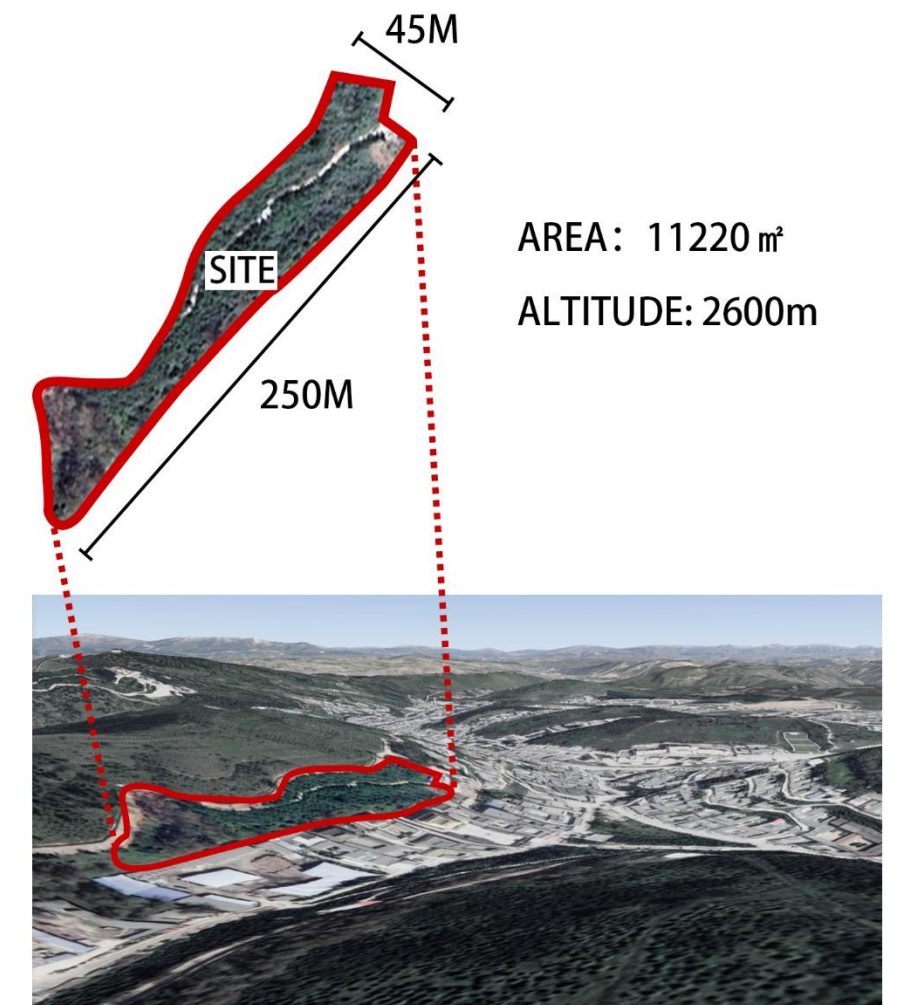


A small clinic inside the temple, used to treat common ailments of tourists and residents of the temple.

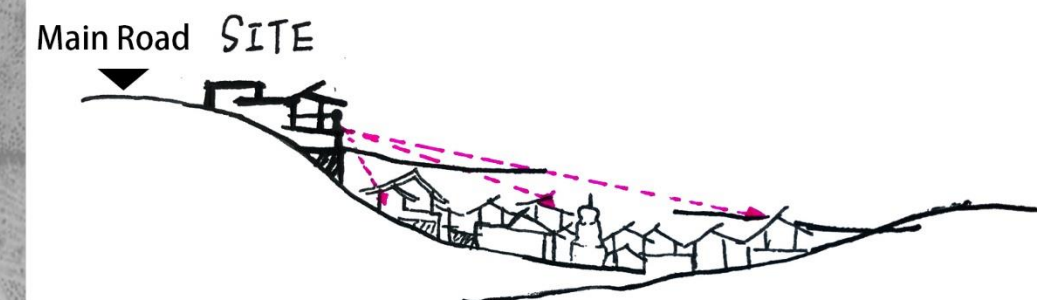
13. Institute of buddhist



Monks have to study for several years before they can be awarded a degree if they pass the exam. The speaker of the sutra is not only a senior monk from this mountain, but also a famous monk from other places.



The Site is higher than the temple, so there is a good view, and at the same time not affected by the flow of people in the temple.



The base can not only have a good connection with the temple, but also have a separate entrance and exit because of the main highway to the east of the base.

As for orientation, the main buildings of the site is oriented to the southeast, so that you can get enough sunlight without getting too sunburnt.

LOCATION

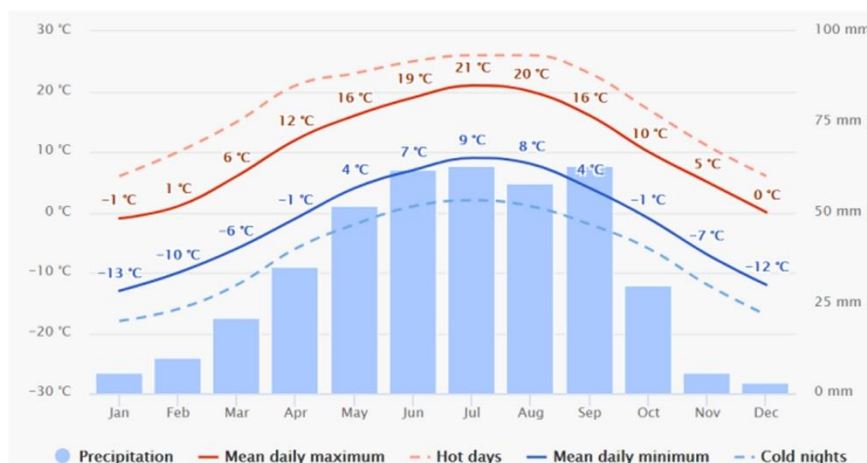


CLIMATE

Data source: Meteoblu (www.meteoblu.com)

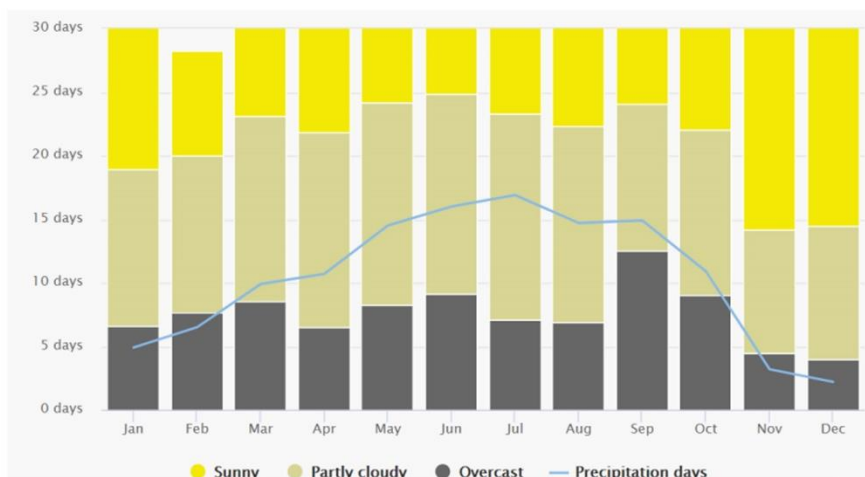
The meteoblu climate diagrams are based on 30 years of hourly weather model simulations and available for every place on Earth. They give good indications of typical climate patterns and expected conditions (temperature, precipitation, sunshine and wind). The simulated weather data have a spatial resolution of approximately 30 km and may not reproduce all local weather effects, such as thunderstorms, local winds, or tornadoes.

Average temperatures and precipitation



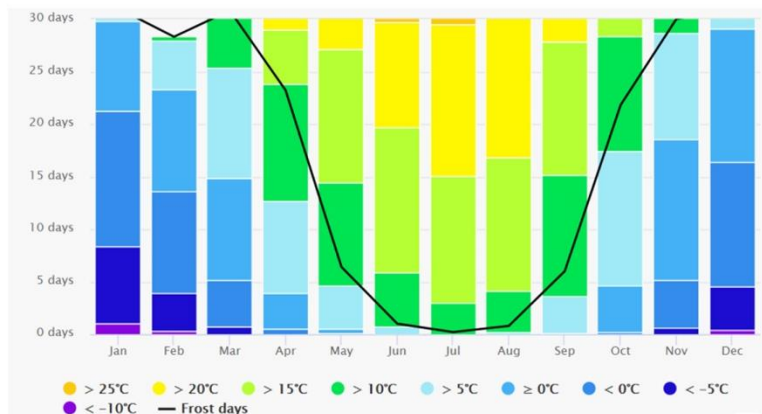
The "mean daily maximum" (solid red line) shows the maximum temperature of an average day for every month for Huangzhong. Likewise, "mean daily minimum" (solid blue line) shows the average minimum temperature. Hot days and cold nights (dashed red and blue lines) show the average of the hottest day and coldest night of each month of the last 30 years.

Cloudy, sunny and precipitation days



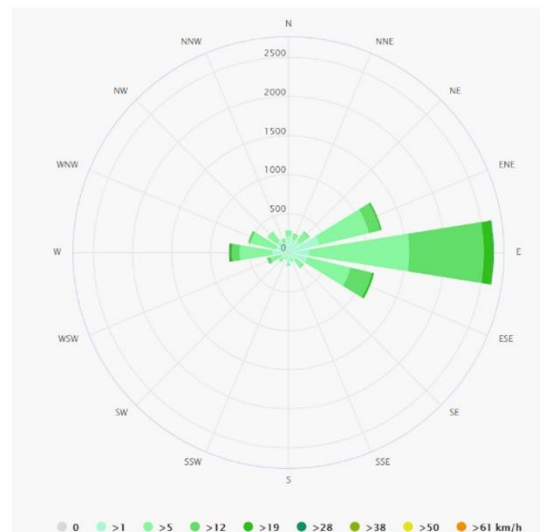
The graph shows the monthly number of sunny, partly cloudy, overcast and precipitation days. Days with less than 20% cloud cover are considered as sunny, with 20-80% cloud cover as partly cloudy and with more than 80% as overcast.

Maximum temperatures

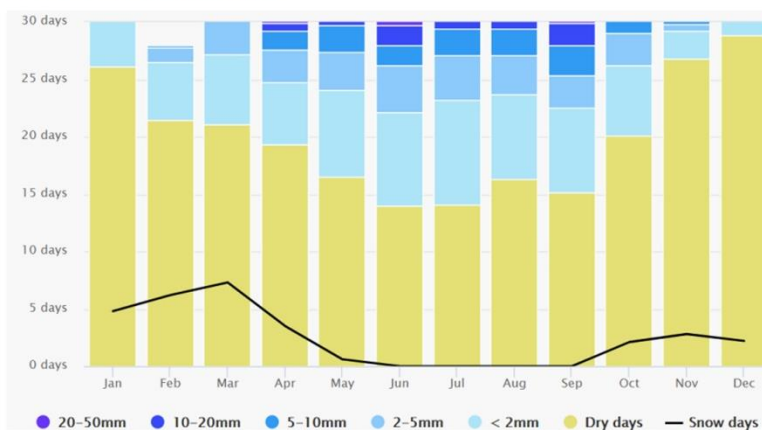


The maximum temperature diagram for Huangzhong displays how many days per month reach certain temperatures.

Wind rose



Precipitation amounts



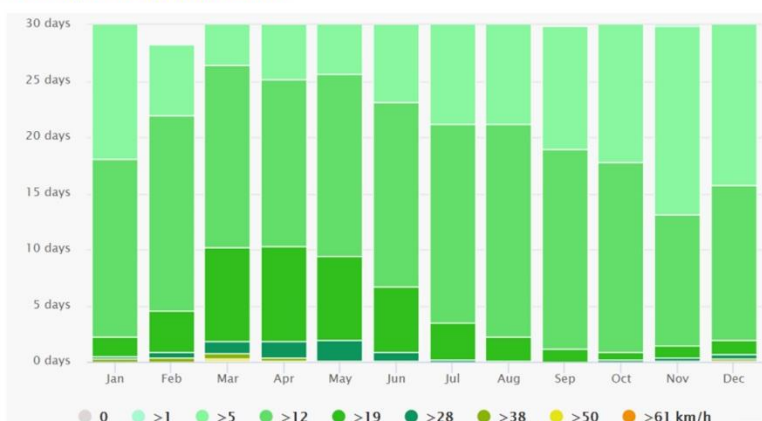
The precipitation diagram for Huangzhong shows on how many days per month, certain precipitation amounts are reached.

Other informations

Climate type: **plateau continental climate**
 Annual average temperature: **5.1 °C**
 Average annual precipitation: **509.8 mm**
 Annual evaporation: **900 -- 1000 mm**
 Altitude: **2225-4488 m**

The average frost-free period is **170 days** with **2453 hours** of sunshine.

Precipitation amounts

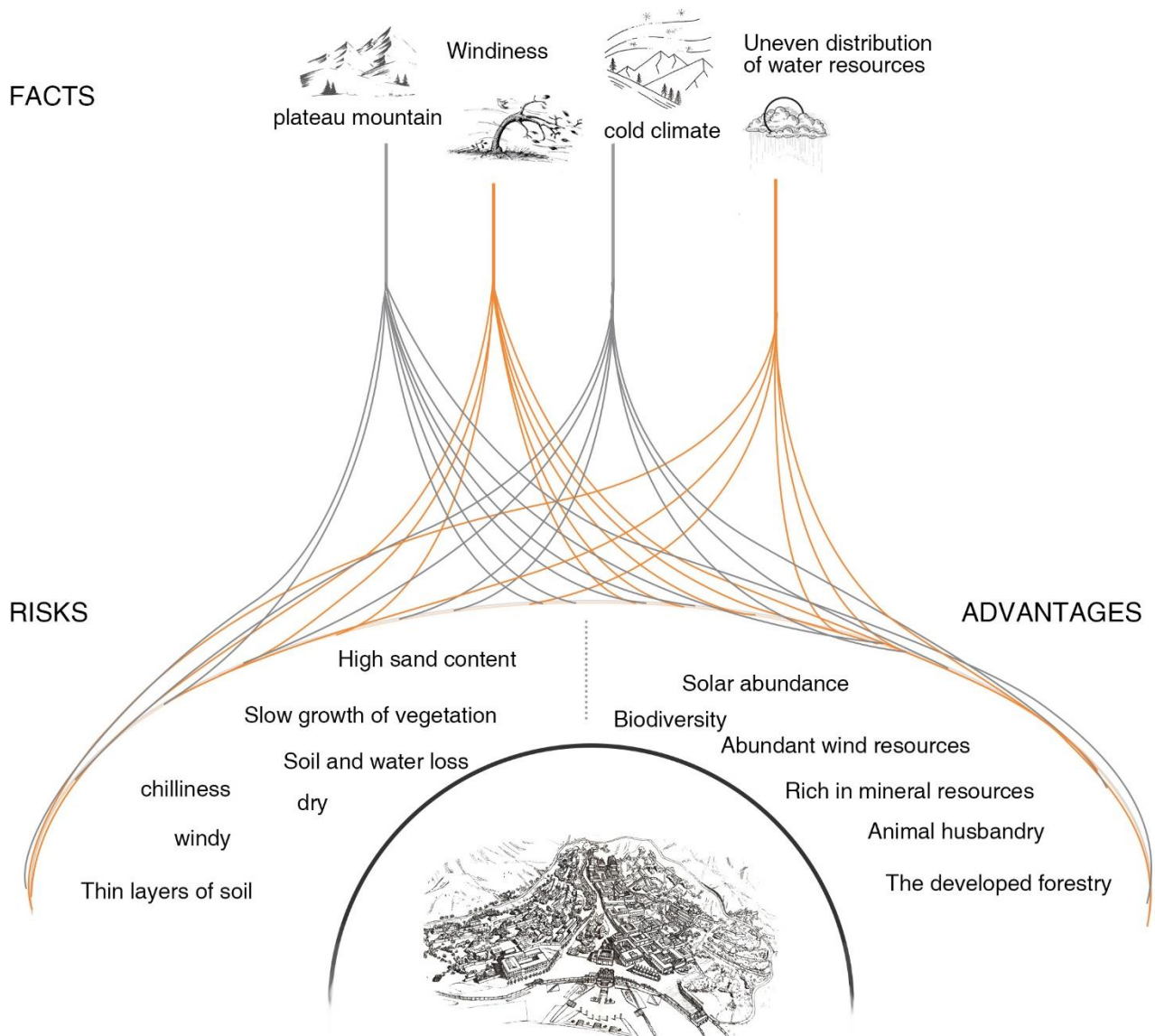


The diagram for Huangzhong shows the days per month, during which the wind reaches a certain speed.

SITE ANALYSIS

Geographic risk and resource

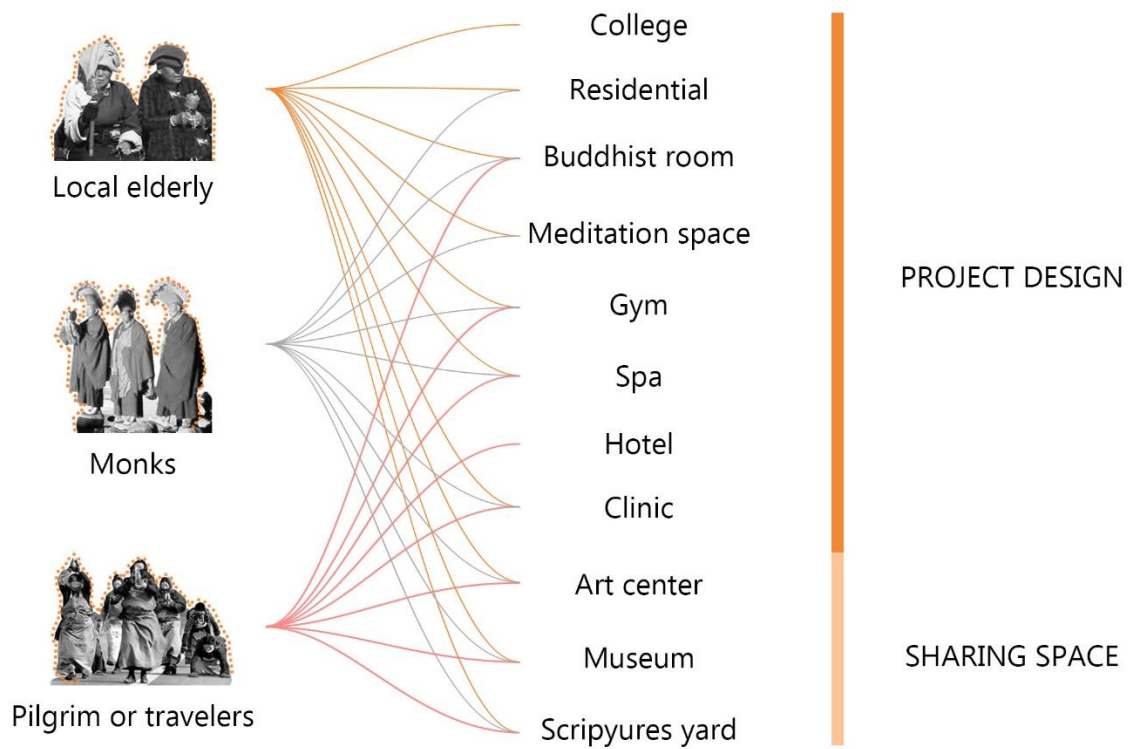
Huangzhong county lies in the northeast of qinghai-tibet plateau. It has a high topography, cold and dry climate, extremely harsh natural structure and special geographical conditions, and extremely fragile ecological environment system.



FUNCTION ANALYSIS

Different people have different needs

The functions that people need can be met by building a new space in this project, or by making use of the existing spatial functions of the temple



Functional explanation

Buddhist room



As a place of daily worship, In the days without a major holiday event, elderly people or monks can practice religion without going to the temple.

Meditation space



Meditation is a common religious practice in Buddhism.

Local characteristics

Prayer flags

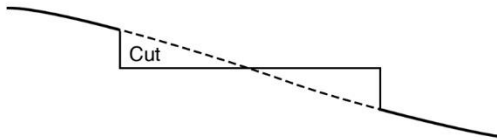


Prayer flags can be seen everywhere in Tibetan areas, which means praying for good luck and eliminating disasters.

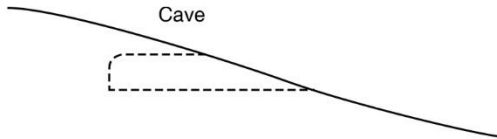


According to the regulations, Tibetan monks and nuns usually live in narrow houses, even the residence of the high-ranking lama. Affected by this, the houses of the Tibetan people are mostly small rooms.

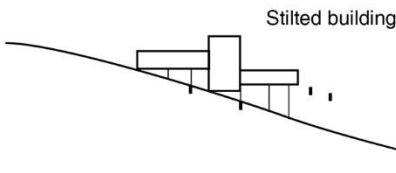
Solution 1



Solution 2



Solution 3

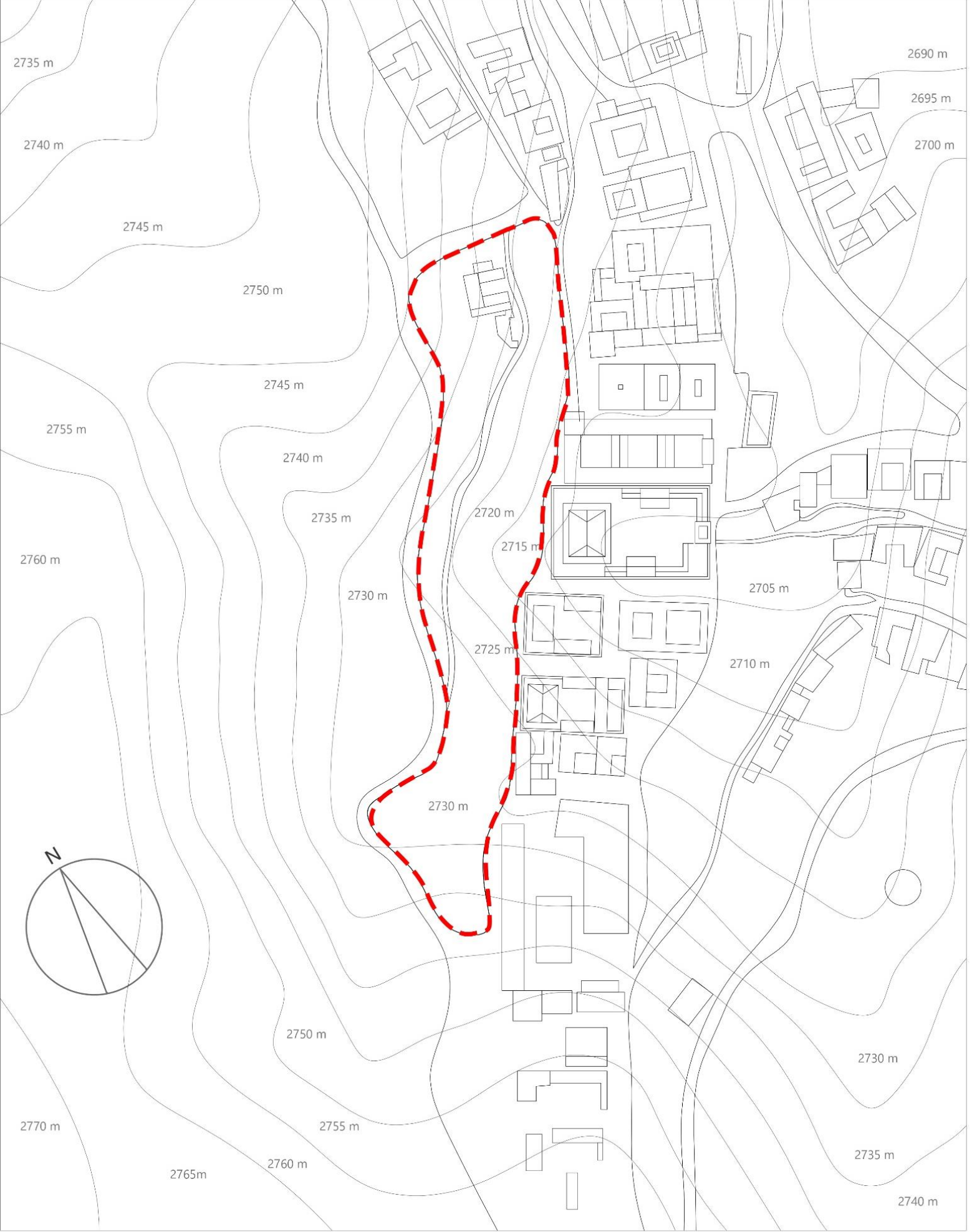


Caves are a common element in traditional Chinese buddhist architecture. The first grottoes were natural caves in the mountains, where monks would practice during their travels to escape the wind and rain.

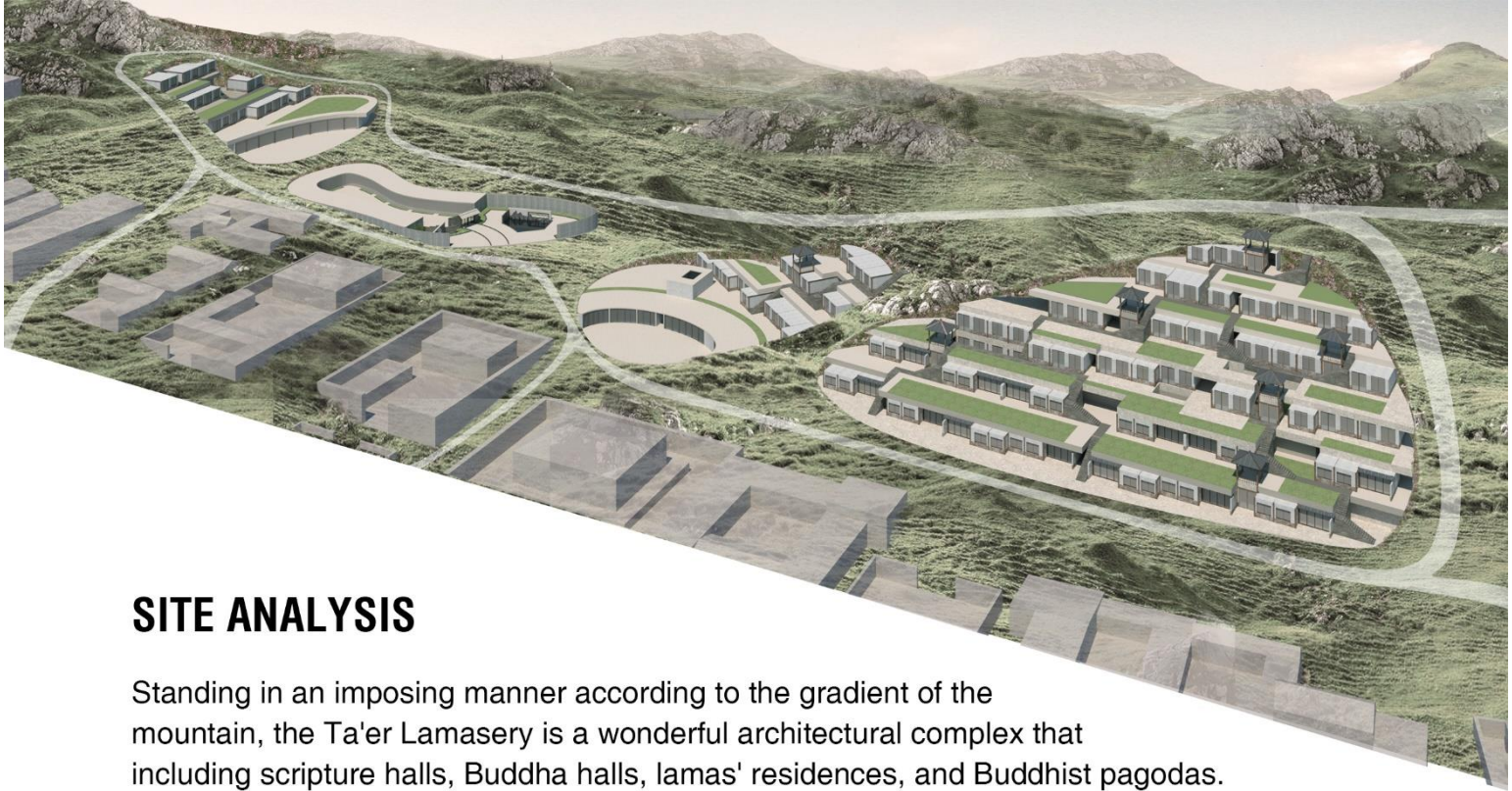
This is hongya cave, a famous scenic spot in chongqing, This group of buildings is built along the mountain, with flexible space and no fixed form.

By layering the platform, hanging feet, overlapping, cliff and other mountain architectural techniques, the company organically integrates six business forms, including catering, entertainment, leisure, health care, hotel and characteristic cultural shopping, to form a unique "three-dimensional aerial pedestrian street", which has become a layered and texture of urban scenic spots and commercial centers



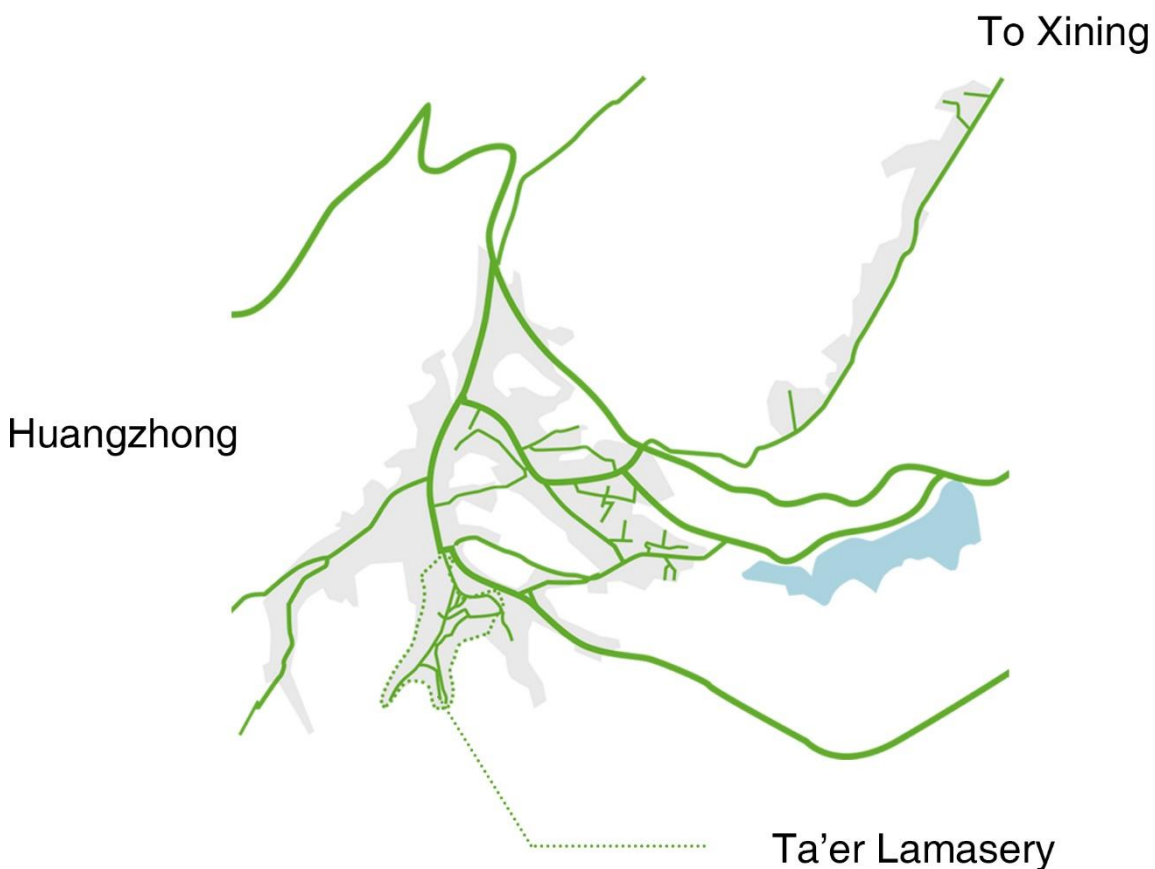
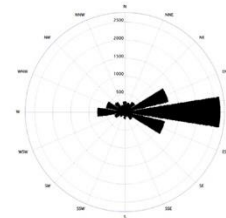
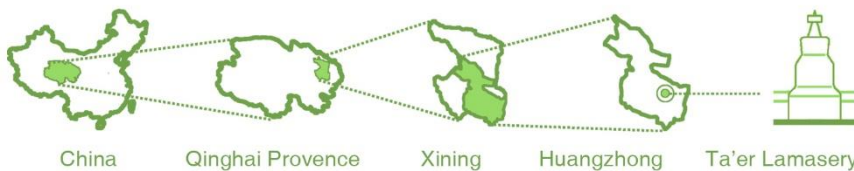


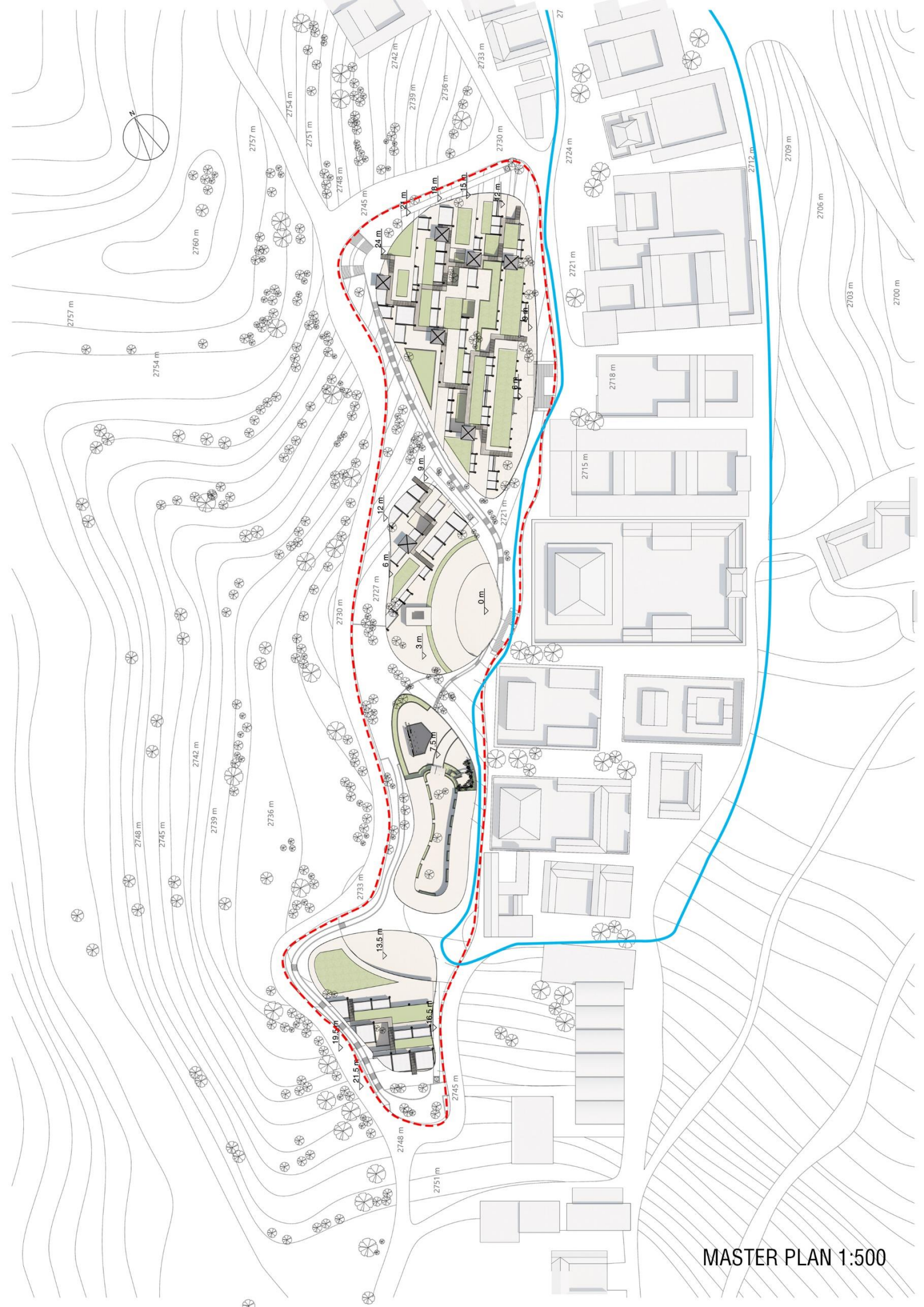
PART III



SITE ANALYSIS

Standing in an imposing manner according to the gradient of the mountain, the Ta'er Lamasery is a wonderful architectural complex that including scripture halls, Buddha halls, lamas' residences, and Buddhist pagodas. Built in 1622, in the center of the entire complex, the Great Hall of Gold Tiles is the core structure of the lamasery.



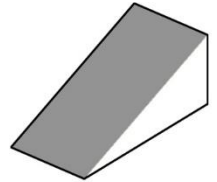




Fuction Set

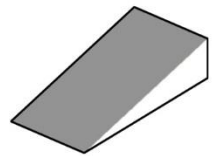
According to the slope of each group, different functions are determined.

23 ▽



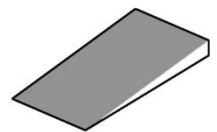
residence for healthy elderly
residence for Monks
restaurant
store
Meditation hole

12 ▽



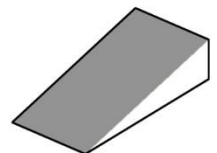
Mess
Buddhist room
residence for elderly
clinic
college for elderly

5 ▽



Physical therapy
residential for elderly needs help
Nursing home

12 ▽

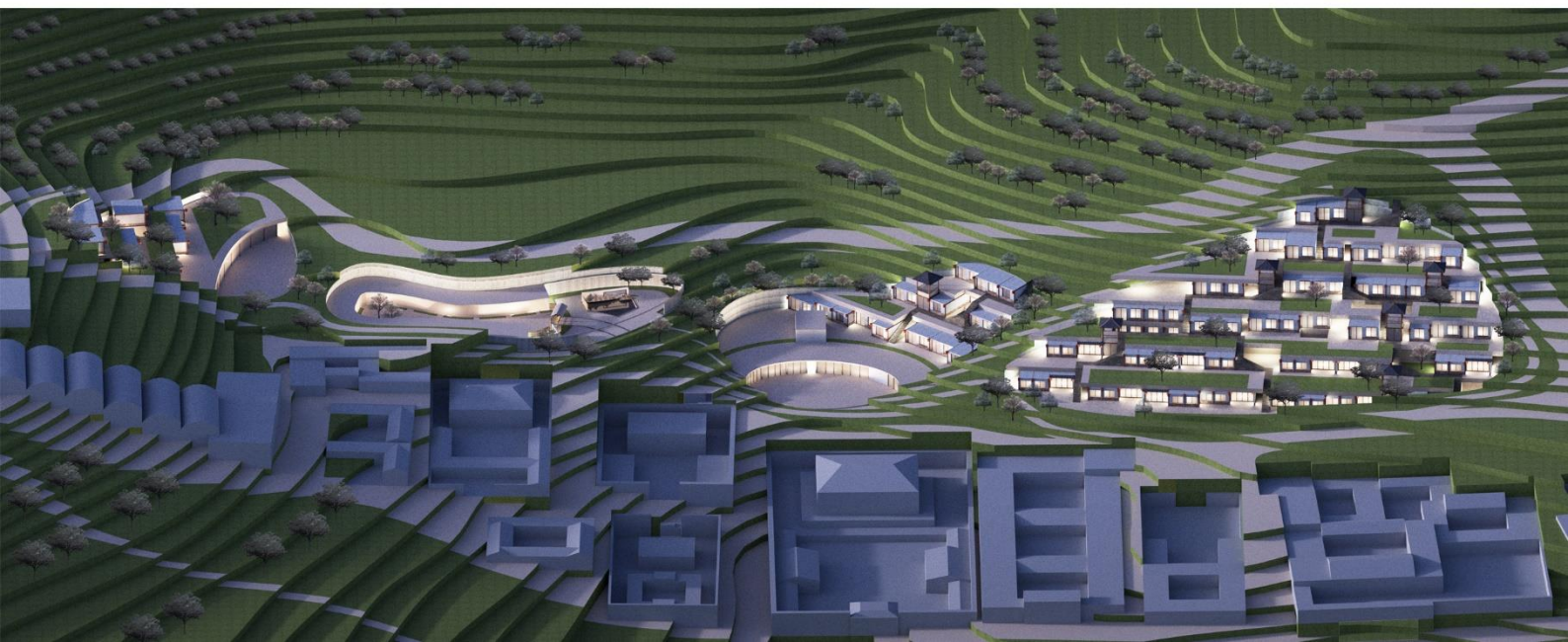
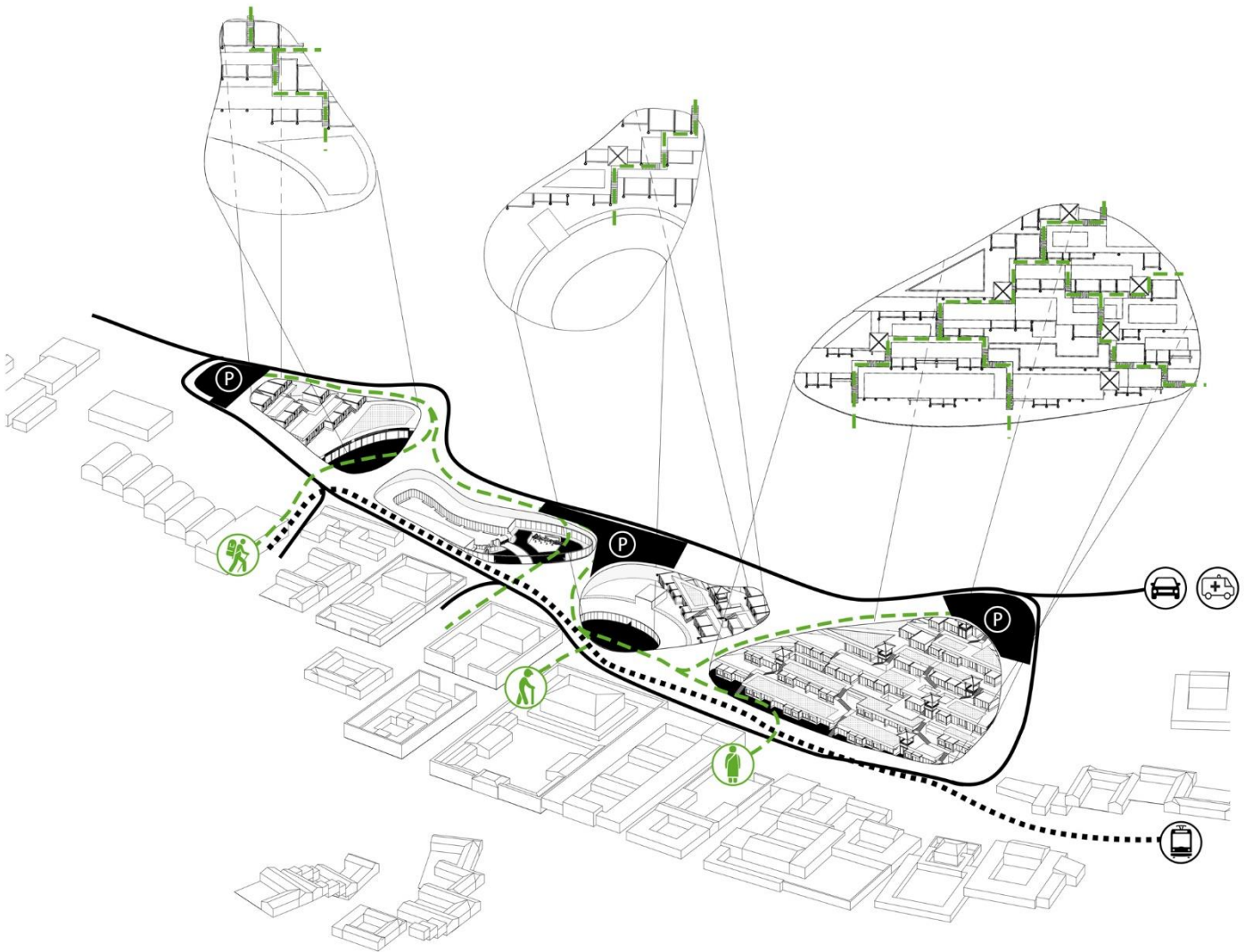


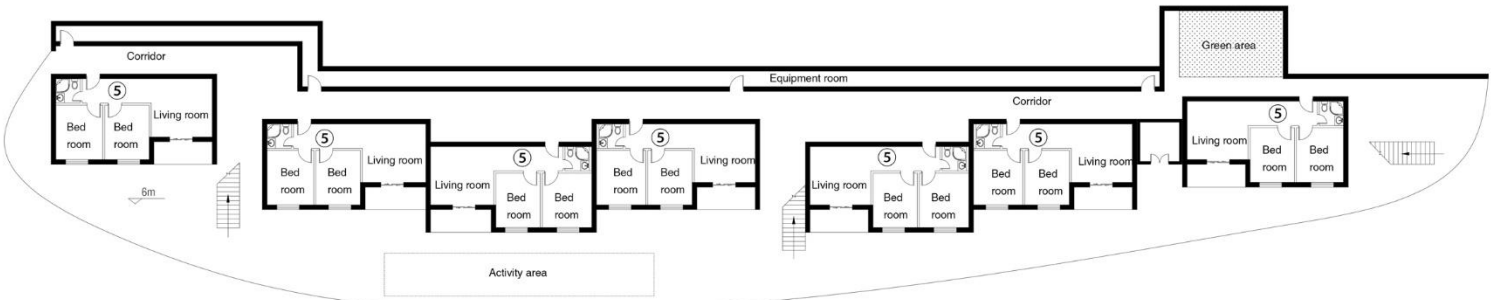
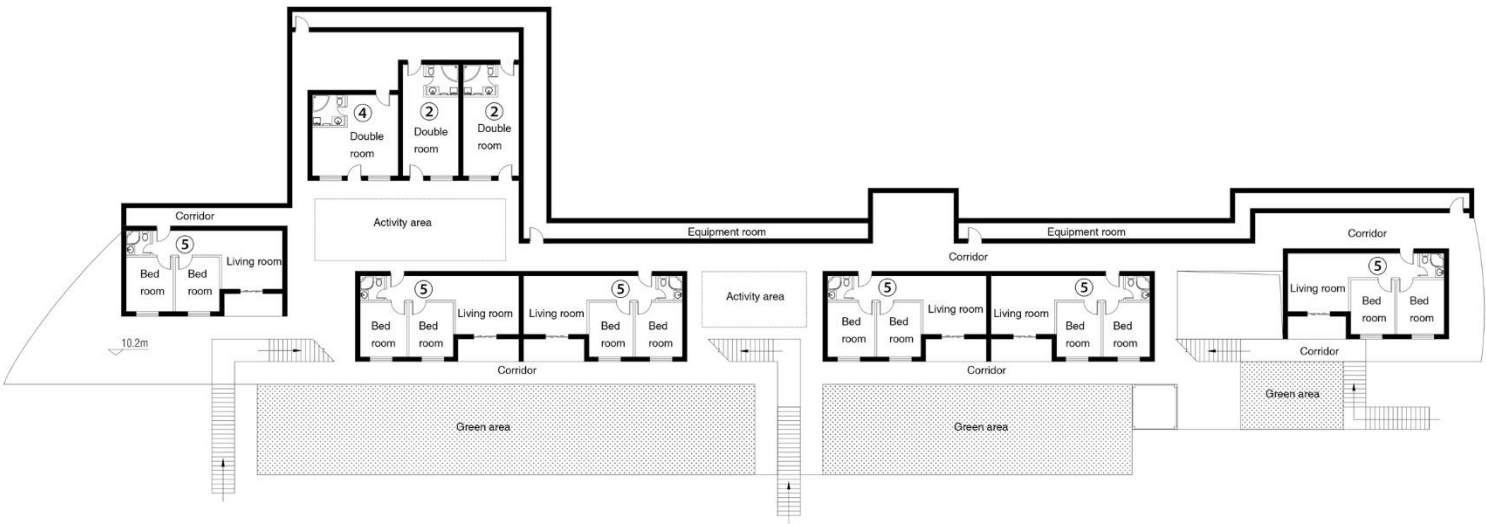
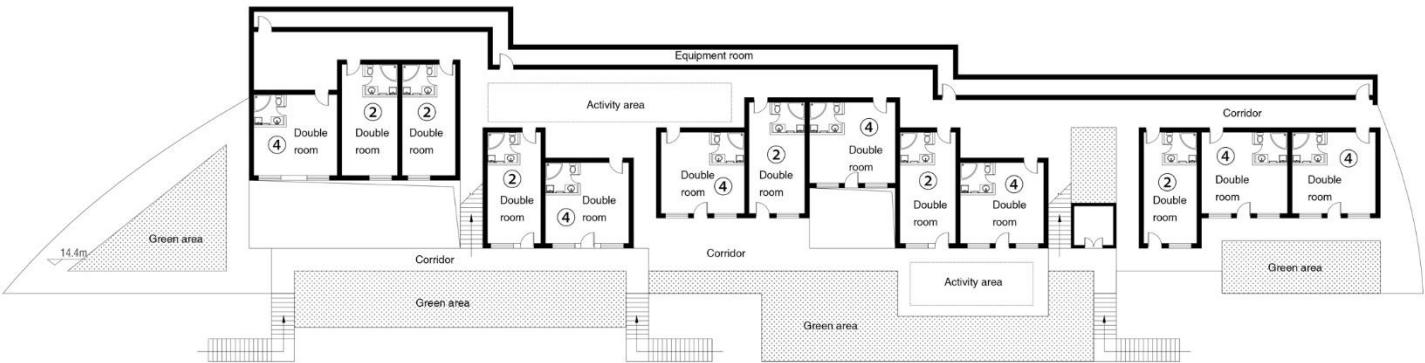
The hotel

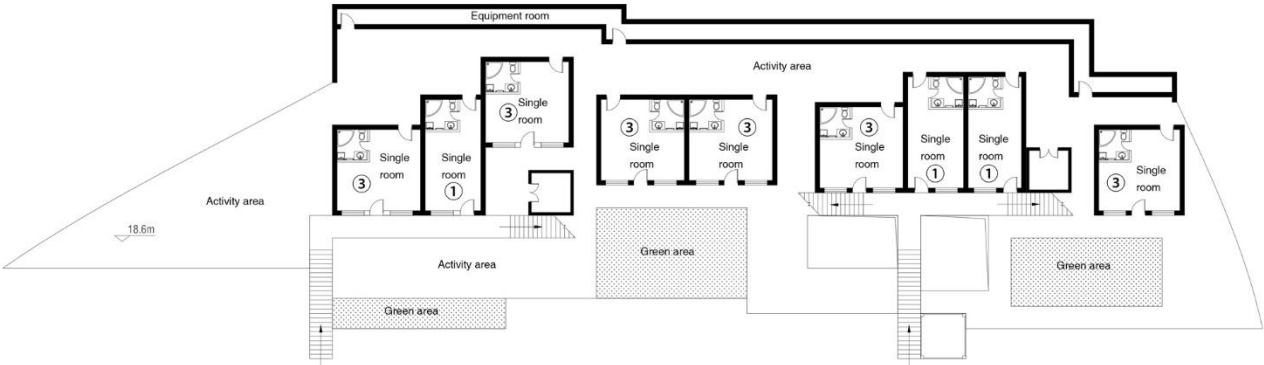
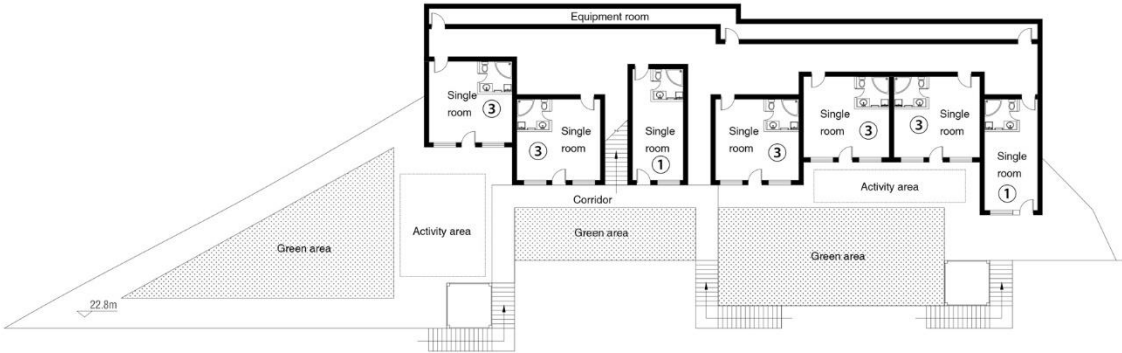
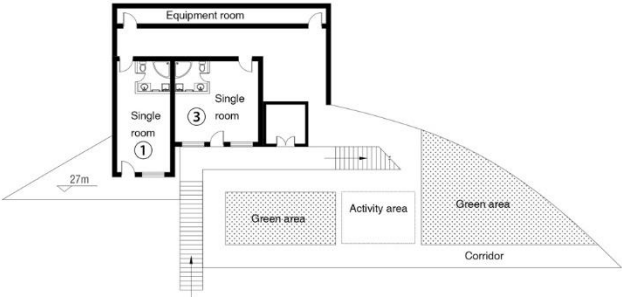
PLAN 1:500

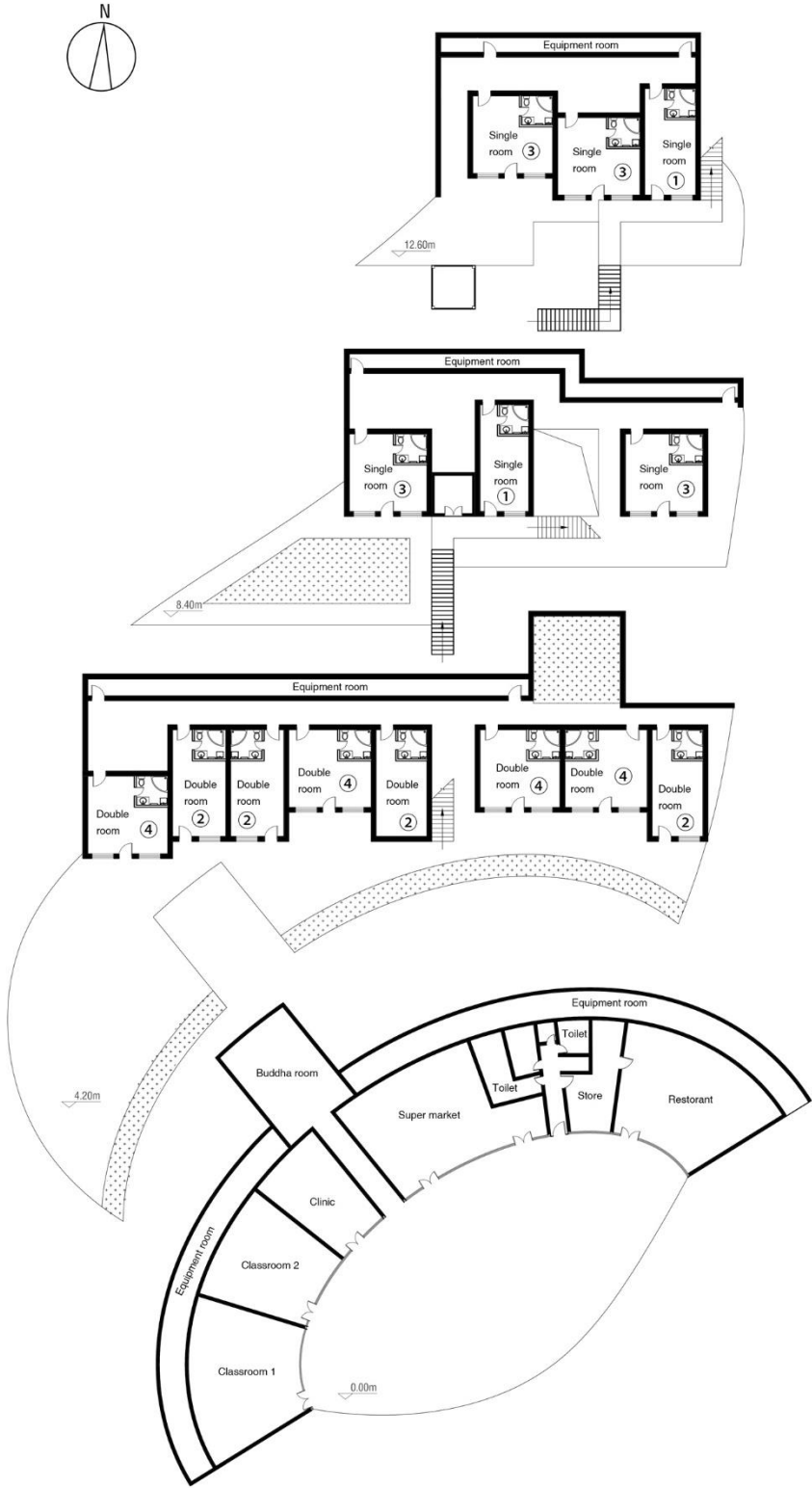
MULTI-LAYER MOBILITY

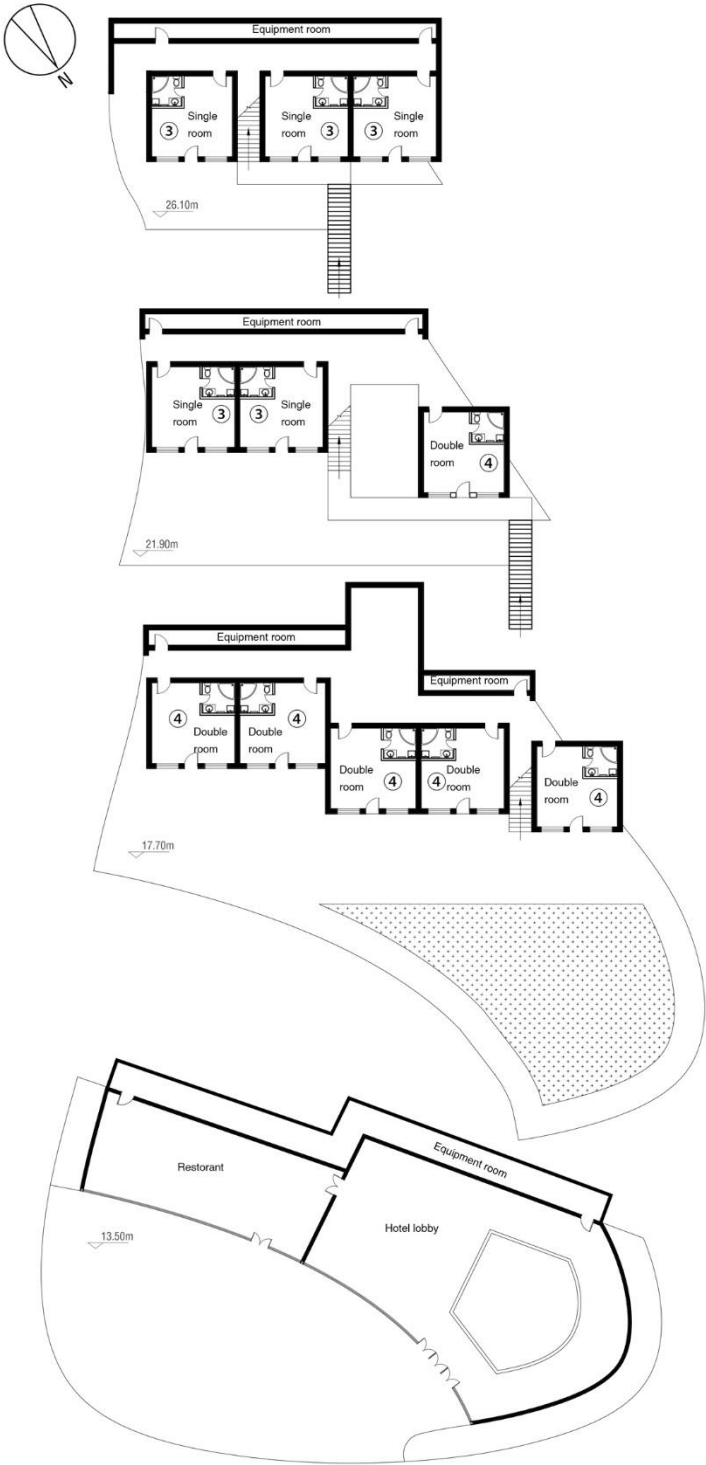
The mobility system for the whole project is in a hierarchical form —The connections between each group, the internal connections within each group, the emergency access and the public transportation system of the whole base together form a transportation system. Each group is attached to a car park that serves as a connection to the main road, as well as the parking and turning of emergency vehicles. Each group also has a road connecting the temple.



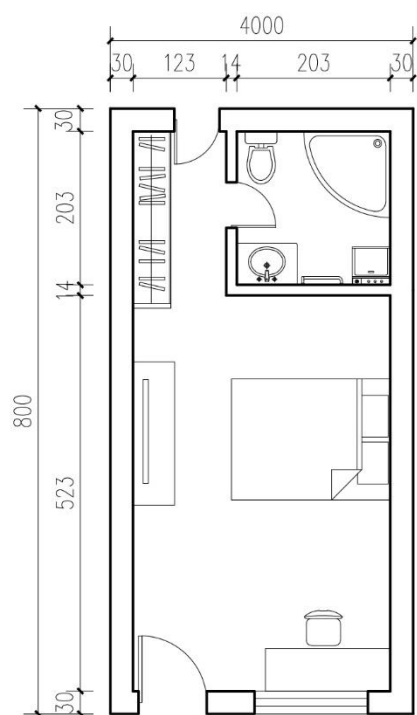




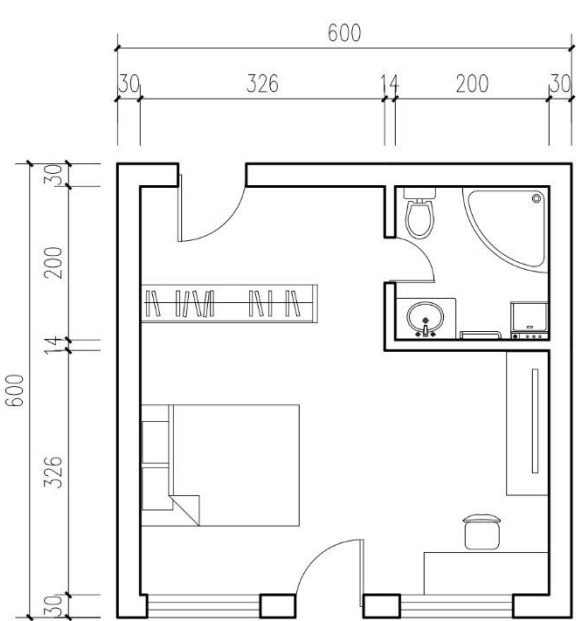




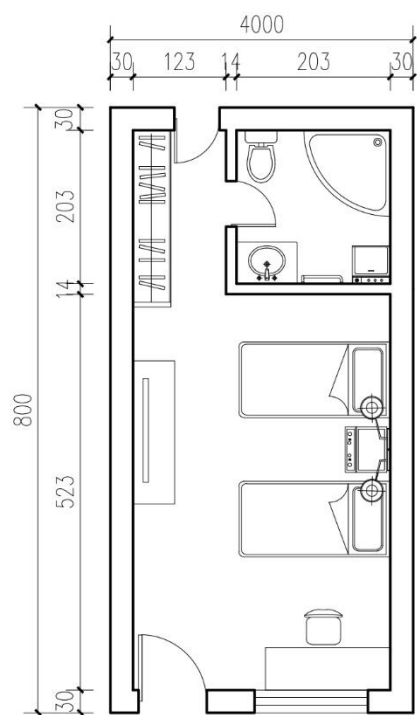
RESIDENCE DWELLING PLAN 1:100



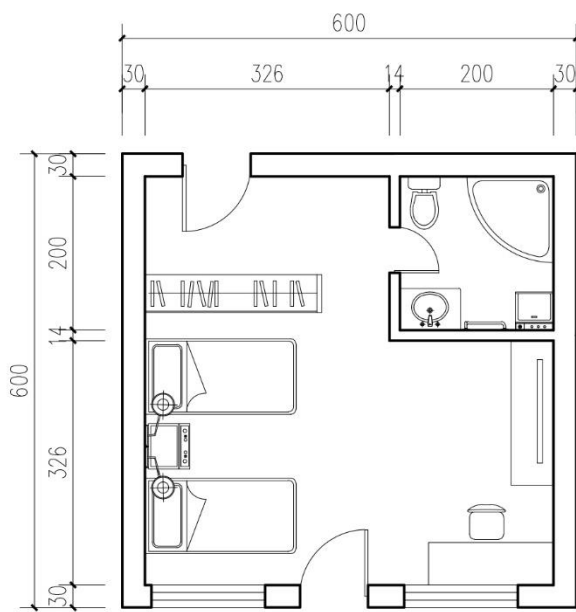
① Single Room Type 1



③ Single Room Type 2

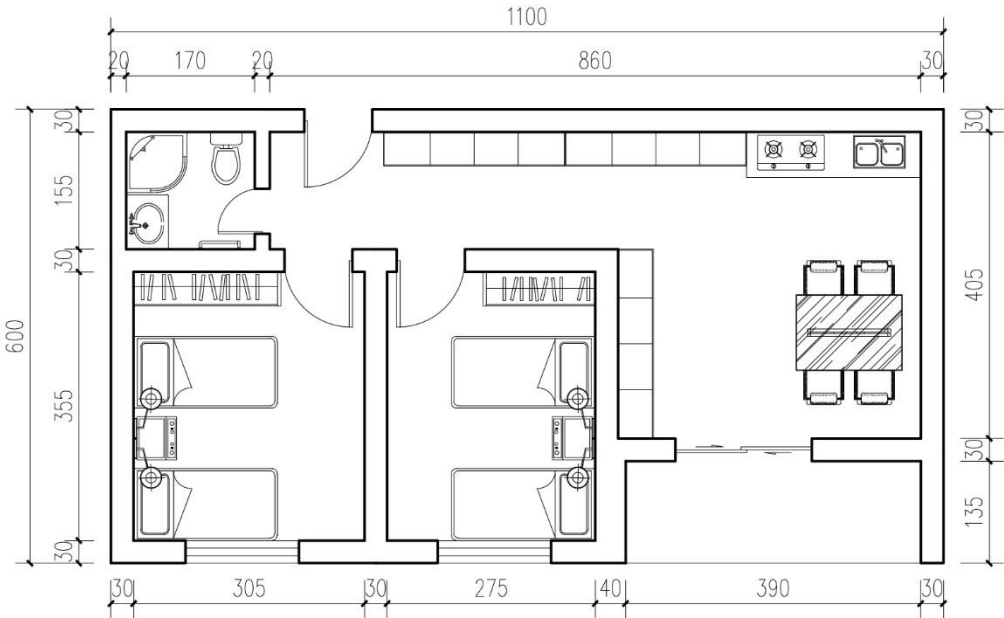


② Double Room Type 1



④ Double Room Type 2

RESIDENCE DWELLING PLAN 1:100



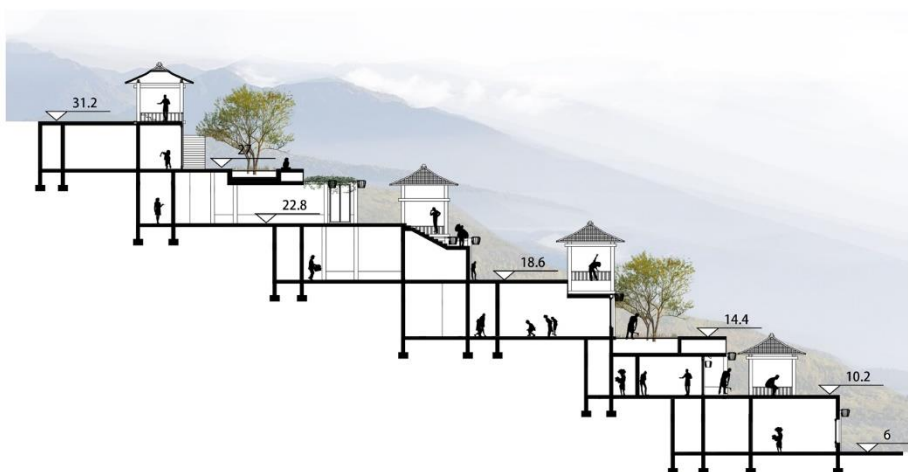
④ Multiple Room Type



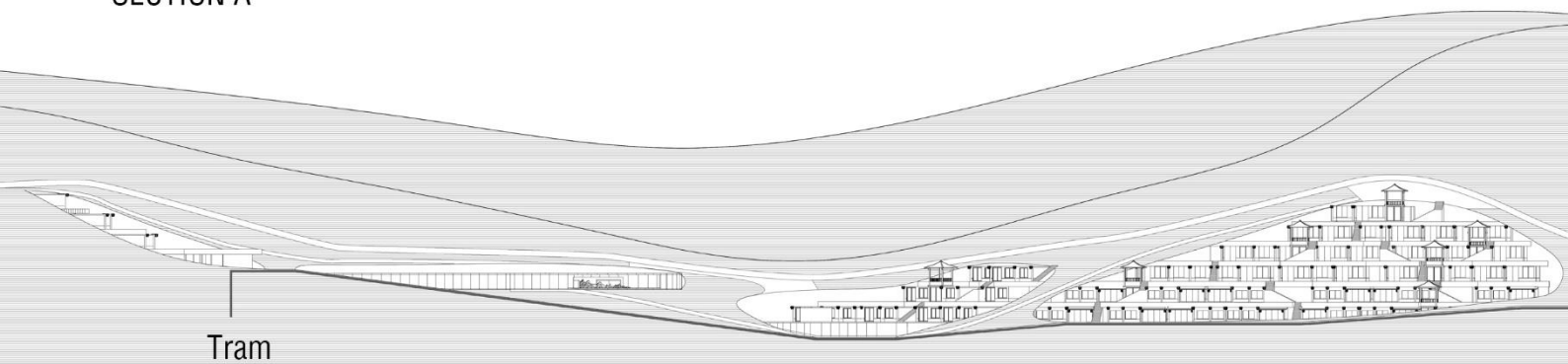
SECTION B 1:500



SECTION C 1:500



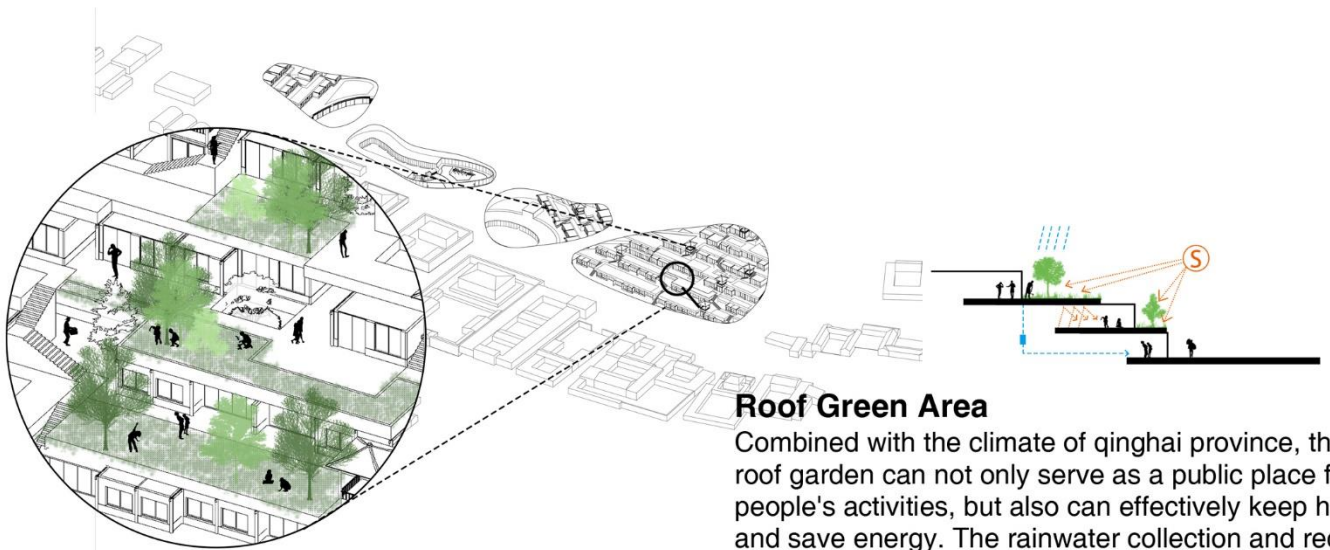
SECTION A



SPACE ANALYSIS

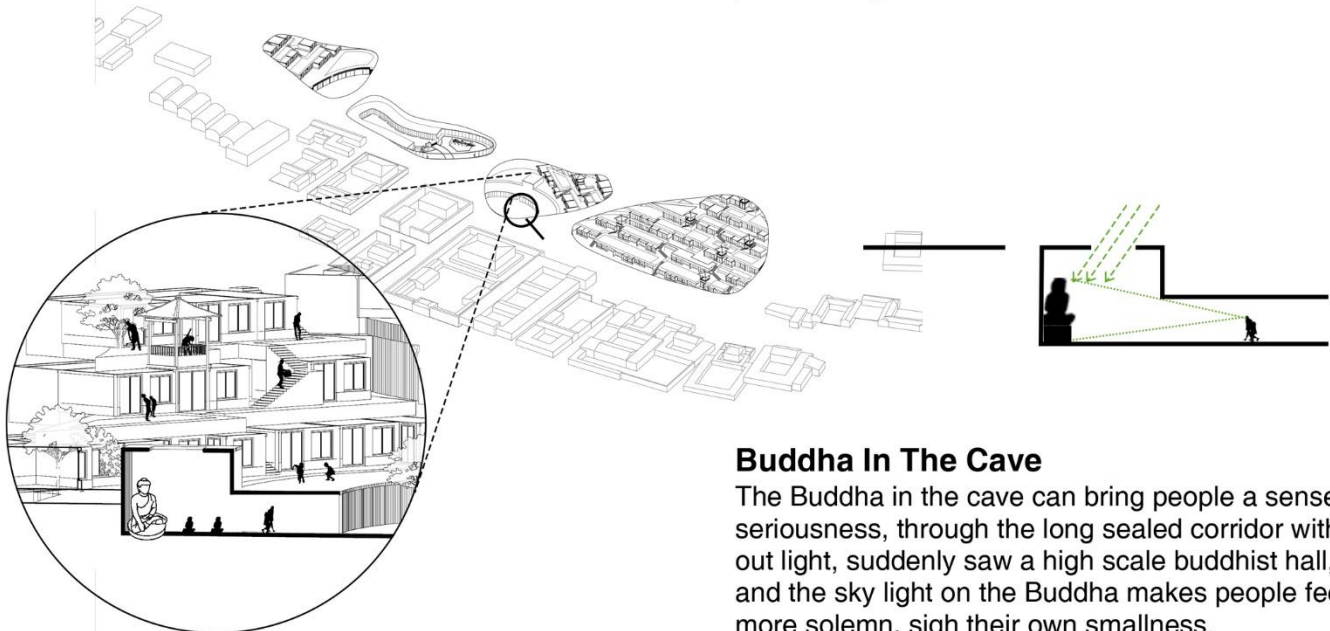
The project combines different functional needs and has many different kinds of spaces.

Be flexible to the needs of the residents.



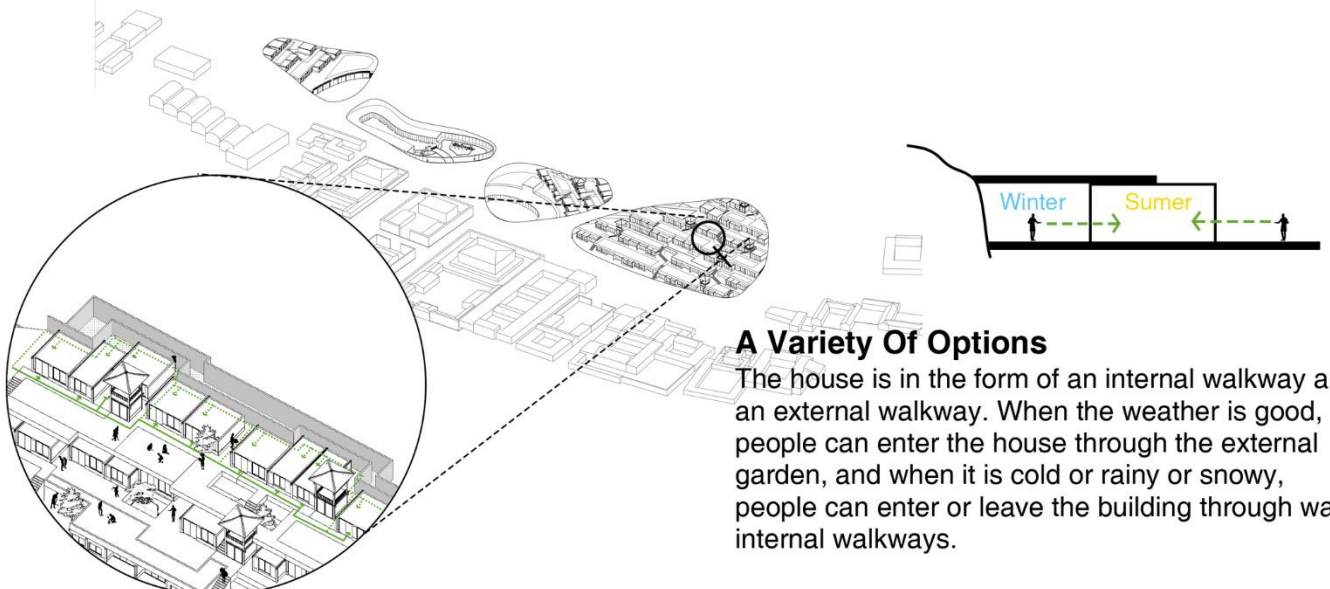
Roof Green Area

Combined with the climate of qinghai province, the roof garden can not only serve as a public place for people's activities, but also can effectively keep heat and save energy. The rainwater collection and recycling system combined with the roof garden also provides a good sustainable effect.



Buddha In The Cave

The Buddha in the cave can bring people a sense of seriousness, through the long sealed corridor without light, suddenly saw a high scale buddhist hall, and the sky light on the Buddha makes people feel more solemn, sigh their own smallness.



A Variety Of Options

The house is in the form of an internal walkway and an external walkway. When the weather is good, people can enter the house through the external garden, and when it is cold or rainy or snowy, people can enter or leave the building through warm internal walkways.

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