



Hong Kong Real Property Federation
Guangdong-Hong Kong-Macao Co-Development Region

GUISHAN ISLAND

“ City of the Century ”

2021 - 2049 Proposal

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Hongkongers, we deserve a better tomorrow.

It has been over a decade since the European and American financial crisis in 2008, and in recent years, the international relations and economy have entered another period of turmoil. In September 2018, our association proposed the development of Guishan Island and surrounding waters to actively respond to a challenging future. The world had just been shrouded in the haze of series of trade war, tech war, propaganda war and diplomatic crisis in the last two years, and now in 2020, everyone, southern or northern, young or elder, is again challenged by the global pandemic.

Hong Kong, as the freest and most open urban economy in the world, has undoubtedly suffered in many ways throughout the year. We tumble in the face of 2020's adversities while we have yet to get out of the chaos of 2019. Waves after waves of pandemic outbreaks ironically become the perfect embodiment of Hong Kong people's angst and disappointment.

On the one hand, we hope the community to work together, with a self-disciplined and responsible attitude, to overcome the ordeals brought by coronavirus. On the other hand, we must have faith and aim further; by welcoming new ideas and new technologies, we can breach the development bottleneck and solve deep-seated social problems in Hong Kong. Surely, the accumulated conflicts, disorder and injustice over the years will not be simply gone with the wind, but we, Hongkongers, after desperately expressing our rage and opinions, need to finally explore practical ways for future betterment.

We are convinced that instead of sitting in trouble and blaming others, it is better to cooperate, break through boundaries and maintain an open mind; to develop new visions and mindset; to explore new industry and lifestyle; to pursue the dreams of all walks of life from different generations, sectors or classes. We must progressively eliminate problems and resolve conflicts on the path to make social progress.

Staying hopeful in a crisis requires not only courage, but also enthusiasm. We hereby call on everyone of this city to be proactive and vote, with regards to the future of us, and of the new generation. Here, every one of us has gone through ups and downs, joy and despair; the light of every family has shined under the Lion Rock. She has long become our home, and our only home.

Whatever storms we have been through, we will always welcome every newcomer from Vancouver, Sydney, Melbourne or wherever they are from, and our old friend to return home. Whenever we have a chance, we want to present you a good, a better and the best Hong Kong. She is a home that belongs to us, also the dream town of many others. As we survive the struggles, we now become much stronger.

Even if there are thousands of turns and bumps, Hong Kong will always be the unsinkable boat. Just as the past few decades, generations of Hong Kong people have overcome obstacles one after another, while we have made glory again and again. We believe that through unity, perseverance and self-reflection, Hong Kong and Hong Kong people will finally usher in a new golden age.

From the bottom of my heart, there is only one city in this world that is better than the old Hong Kong, and she is within our hands' reach, as long as we dare to build it.

How to tackle the global challenge?

"The total assets of the Federal Reserve, the European Central Bank, the Bank of Japan, and the Bank of England have skyrocketed from US\$3.3 trillion in 2007 to nearly US\$20.5 trillion this year, a cumulative increase of 5.2 times. "

"The OECD report in 2019 stated: "The global middle class is being severely squeezed, including its percentage of population and consumption power. The governments must reform the tax system to protect the middle class, which is the main force of consumption and production. The situation of middle-class squeeze in the 36 member states has worsened; the proportion of middle class in the population has dropped from 64% in the 1980s to 61%, afflicting particularly the young people. 68% of the aged baby boomers are listed in the middle class, but only 60% of the millennials are among the group."

"The poverty rate among young people aged 18-29 reached a new high this year since 2010, accounting for about 10% of the overall population living in poverty. Furthermore, the proportion of middle-class households in Hong Kong plummeted from 32% in

2001 to 20% in 2016. The decline was as high as 40% between 2011 and 2016, which is likely related to the 90% increase in property prices of the same period."

"The average rate of the land-premium income to the general revenue has soared from 8% between 2000 and 2005 to 21% between 2015 and 2020, making it the second largest source of revenue for the treasury. In 2019/20, the overall treasury revenue reached \$567.3 billion. Although it decreased by 5.4% year-on-year, the land-premium did not drop but rose by 22% instead; which equals to 25% of the overall revenue, and became the largest source of revenue for the treasury."

Land development in Hong Kong is certainly limited by geographical conditions, but it is also caused by cumbersome administrative procedures, divergent opinions from all sectors, reliance on land finance and failing to break through the inherent development model.

The accumulation of the above-mentioned problems has caused three major difficulties:

01

Land ownership inequality has further worsened income distribution and caused generational poverty; central banks have responded to the financial crisis with quantitative easing, resulting in free flow of funds in Hong Kong and unaffordable property price for general public.

02

The living environment of low-income people, especially the elderly, does not meet humanitarian standards, which magnifies the problem of insufficient retirement protection in Hong Kong.

03

Social resources are increasingly concentrated in traditional financial and real estate industries. The lack of diversity causes difficulty for the new generation to fully develop their strengths; thus hindering class mobility and generational change.

How to prioritize short-, medium- and long-term challenges?

01

In response to the plight of elders living in poverty, an "elderly community" will be built in a short period of time, accompanied by medical and nursing services.

02

Sustain land reservation and assist general public, especially young families, to purchase properties by implementing the "4, 3, 2, 1 housing ladder" policy, so they can benefit from economic development and social progress.

03

The government and society are gradually getting rid of "land finance" and reducing their dependence on the income from land sales and stamp duty. Through the development of multiple "industrial zones", a more diversified economy and sustainable development can be promoted.

04

By developing more land, the situation of land shortage can be improved, thus promoting "industrial diversification". On the contrary, selling lands can only gain short-term profit.

05

The development of "industrial zones" can create "cluster effect" and provide more decent job opportunities for young people, and encourage social mobility.

06

Thus increasing the proportion of profits tax and salaries tax in tax revenues and prompting the government to create more quality jobs, so as to achieve public financial balance.

07

Provide diversified employment and entrepreneurial opportunities for the new generation with different academic backgrounds and different interests. Give full play to the advantages of local education and human resources.

08

Through the auction of "price per square foot-limited land", developers, construction, surveying, engineering and related industries can continue to participate in residential property development. In addition, as "industrial zones" of medical care for the elderly, smart logistics, technology and cultural innovation are opening up, there will be new potentials of development for people in those sectors.

Why Guishan Island?

01

Favorable geographical location: It is located in the middle of the Pearl River Estuary, not far from the most advanced cities: Hong Kong, Shenzhen, Zhuhai, and Macao. It takes 30 minutes to travel by water from Central, Tsim Sha Tsui, Tsuen Wan and Tuen Mun; 20 minutes for Tung Chung, Macau and Zhuhai; 40 minutes for Shenzhen.

02

Close to Hong Kong: It is only 5 kilometers away from the southwest diversion of Lantau Island, and can be connected by a "highway-railway" dual-use bridge/tunnel.

03

Fast construction results: 10 km² of flat land is ready to be used for development. With the MiC technology, the urgent needs of the society can be solved.

04

Large area for development: The surrounding vast sea area in the east, south, west side can be reclaimed to create land for the industries and for the living environment of people.

05

Less infrastructure required: Existing piers and routes can reach Shenzhen, Hong Kong, Zhuhai and Macao. By expanding the current road and railway system of Lantau Island and connecting it to the "Guishan-Lantau" bridge/tunnel, the north and south road, and railway system of Lantau Island can also be upgraded.

06

Low risk for land reclamation: The geology, climate, and hydrology are similar to Hong Kong, and the reclamation technology is mature and diversified.

07

Suitable for large-scale construction: There is a low risk of subsidence due to its granite landform. It can pursue both high-rise and underground development, which meets the needs of a "consolidated city".

08

Low relocation costs: The island is sparsely populated, with limited economic activities and megastructures, such that demolition costs are controllable.

What is the positioning of this project?

The Guishan Island project does not conflict with other large-scale development plans that have already been implemented or are in progress, such as the North East New Territories, Hung Shui Kiu, East Lantau artificial island, and the Tuen Mun South project. Since the scale, positioning, function, and progress of the above-mentioned projects, as well as the development, financing, and management models are entirely different, there is no need to choose one over another.

Reclamation in Hong Kong's inner waters, especially in locations near Central and Tsim Sha Tsui, is beneficial for the development of existing pillar industries: finance, real estate, and professional services. To develop the northeast and northwest of the New Territories, it is necessary to coordinate with the east and west wings of Shenzhen, which are Yantian District and Nanshan District, and to form an "One River, Two Banks" industrial layout.

Guishan Island is the best place to start if we want to develop new industries, attract global talents, improve the living environment of people, and to build a greater industrial zones and industrial chains through logistics network, air, land and water transport network. Since we believe in "sustainable development, equal ownership, and diversified economy", we value the expansive prospects of Guishan Island and its strategic position in the region, in the South China Sea, and even the "Indo-Pacific region".

We regard Guishan Island as the center of the Guangdong-Hong Kong-Macao Greater Bay Area, the Greater Bay Area as the center of the "South China-South China Sea", and the South China Sea as the center of the "Indo-Pacific Region". Through the three-in-one cooperation of the 9+2 cities on manpower, resources and strategies, the Guishan Island area will become a model for the elderly society and a paradigm of sustainable development.



Guangdong-Hong Kong-Macao Cooperation

01 The land developed under this project and the surrounding waters are owned by the Central Government of China.

02 Due to the land connection to the southwest of Lantau Island, the law enforcement and judicial powers of the land developed under this project and the surrounding waters will be carried out by the Hong Kong government.

03 Following the model of Singapore Temasek and Norwegian sovereign wealth fund, the Guangdong-Hong Kong-Macao Greater Bay Area 9+2 members jointly formed the "Guishan Island Investment Fund" to develop land and water areas and establish multiple industrial zones. Since Guishan Island is part of the Wanshan Archipelago, which is under the jurisdiction of Zhuhai, the Zhuhai City Government can invest in the above-mentioned funds with land.

04 "Guishan Island Investment Fund" can be listed locally, domestically and overseas as long-term investment products for institutions, enterprises and individuals. It can promote the diversification of the local financial and securities markets. By allowing local securities trading, investors will be provided with more high-quality funds, bonds, and various fixed-income products in addition to public offering and stocks.

How to realize the development plan by stages?

This development plan will be completed in three stages between 2021 and 2049.

The first phase of the project (2021-2030) includes the development and construction of existing land on Guishan Island, and the reclamation project along its west coast. With the original 10 km² of land on the island, plus 10 km² of land obtained from reclamation, 20 km² of land will be acquired after the completion of this phase of the project. It can accommodate a population of nearly 200,000, and mainly engages in the elderly, medical and logistics industries.

The second phase of the project (2031-2040) will take place in the eastern waters of Guishan Island, namely Dazhuzhou and Xiaozhuzhou, and reclaim 20 km² of land. Education, cultural and creative industries will be core, and the population is expected to exceed 200,000. The third phase of the project (2041-2049) will be done in the west of Guishan Island, which is Qingzhou, Sanjiaoshan Island and other places, reclaiming 30 km² of land, with the "future city" industries as the main focus and a population of over 300,000.

Together with the existing land on Guishan Island, approximately 70 km² of land will be available after this project is completed, which allows 700,000 people to live

and to work in the area. The 70 km² of land of the three islands are initially and equally divided into four major land uses, which are residence, industrial zones, transportation infrastructure, and recreation. The height of buildings gradually descends from the center of the island to the coastal area. The average "plot ratio" is 6. For a "nuclear family" of 2 to 3 people, the living area would be 600 sq. ft., that is 200-300 sq.ft of living area per capita.

The environmental and monetary cost of land reclamation in Guishan Island are relatively low, since Guishan Island locates in the center of the Wanshan Archipelago and has vast sea area, and reclamation is done around the natural islands including Guishan Island, Dazhuzhou, Xiaozhuzhou, Qingzhou, and Sanjiaoshan Island, which is similar to coastal reclamation, instead of in the deep ocean center. In the meantime, as Hong Kong and the provinces along the southeast coast are carrying out urban renewal projects, a large amount of construction waste can be reused for reclamation. With reference to the experience of Shanghai and Tianjin, the sand and mud from river dredging can also be used. When Singapore expanded the "Pasir Panjang Terminal", soil excavated from the construction was utilized for reclaiming land.



Phase I 2021-2030: the existing land of Guishan Island and reclamation along its west coast

Housing target: 80,000 - 32,000 GSH, 24,000 new HOS, 16,000 Starter Homes, 8,000 Private Housing

Industrial Zone	Strategic Function	Infrastructure
1. Medium-density elderly community	Fulfill the demands of elderly homes	Expansion of ferry and cargo terminals on Guishan island
2. Compact correctional facility	Free up 120 hectares of land	Guishan Island-Lantau Island Bridge/Tunnel
3. Smart logistics zone	Free up 120 hectares of land	Cargo airport, terminals and railways

Phase II 2031-2040: reclamation in Dazhuzhou and Xiaozhuzhou

Housing target: 80,000 - 32,000 GSH, 24,000 new HOS, 16,000 Starter Homes, 8,000 Private Housing

Industrial Zone	Strategic Function	Infrastructure
4. Education industry	Create 100,000 jobs	Guishan Island-Zhuzhou Bridge/Tunnel + Ferry and cargo terminals
5. Cultural and creative industry	Create 60,000 jobs	Guishan Island-Zhuzhou Bridge/Tunnel + Ferry and cargo terminals

Phase III 2041-2049: reclamation in Qingzhou and Sanjiaoshan Island

Housing target: 120,000 - 48,000 GSH, 36,000 new HOS, 24,000 Starter Homes, 12,000 Private Housing

Industrial Zone	Strategic Function	Infrastructure
6. Energy technology industry	Create 100,000 jobs	Guishan Island-Qingzhou Bridge/Tunnel + Ferry and cargo terminals
7. Green building industry	Create 80,000 jobs	Guishan Island-Qingzhou Bridge/Tunnel + Ferry and cargo terminals
8. Smart home industry	Create 60,000 jobs	Guishan Island-Qingzhou Bridge/Tunnel + Ferry and cargo terminals

4.3.2.1 Housing Ladder

The residential land on the island are divided by area rather than number of units: 40% GSH, 30% new HOS, 20% "Starter Homes", 10% "Private Housing". With reference to the prices of subsidized housing on Hong Kong Island, Kowloon, New Territories, and Lantau Island in the past two years, a 600-square-foot GSH on the three artificial islands would be at HK\$3 million; new HOS of the same size is about HK\$4.5 million and Starter Homes is HK\$6 million, in terms of the local currency value in 2020.

Based on the above calculation, the Guishan Island reclamation plan will focus on the industrial zones and

a diversified economy, and increase the ratio of "economic land: land for living" to 1:1. At the same time, by reclaiming land and allocating in a reasonable manner, the per capita living area will be increased by 25-85% compared to the current situation in Hong Kong. On the basis of the "4, 3, 2, 1 housing ladder", a substantial improvement in living space would not lead to an increase in mortgage stress.





Phase I: Elderly community, medical and health care industry

[In 2017, Bloomberg Health-Care Efficiency Index compared 55 countries and regions with an average life expectancy of over 70 years, and ranks them by analyzing their data of life expectancy, the percentage of the GDP that the average medical care expenditure per capita and related expenses account for. That year, Hong Kong scored 88.9 points, with 83.98 years of expected life expectancy and US\$2,021 (approximately HK\$15,160) of average expenditure, accounting for only 5.4% of the GDP, and was rated as the most efficient medical care system in the world.]

[In recent years, Hong Kong's public and private medical expenditures have been about HK\$50 billion to \$60 billion. If Hong Kong successfully develops the medical industry, its contribution will be tens of billions. Hong Kong uses about 6% of the GDP as medical and health care expenditure. According to statistics from the Food and Health Bureau, public healthcare expenditures accounted for 3.1% of the GDP in 2017/2018, while private healthcare accounted for 3% of GDP. It would be a game changer if it is doubled. A report compiled by KPMG estimates that in 2017, medical tourism brought 49 billion THB (approximately HK\$12.6 billion) to private hospitals in Thailand. After all, it will be limited by the lack of land supply in Hong Kong, which is often the case. However, medical care is not just a burden, it has room for development. — Dr. Pierre Chan, legislative councillor (medical)]

[In the 2017 policy address, it was mentioned that the Hong Kong government's role and purpose in the "Guangdong-Hong Kong-Macao Greater Bay Area Urban Cluster Development Plan" include active participation in construction, development of innovation and technology, encouraging Hong Kong people to live and retire in the Greater Bay Area, promoting the flow of people, capital, products and information, and creating a great living area for Hong Kong people. We should strengthen Hong Kong's unique advantages on the one hand, and at the same time bring Hong Kong's system to the Greater Bay Area through our professionals, integrate and optimize their medical and health systems to accomplish the goal. — Prof Joseph Lee Kok-long, legislative councillor (health services)]

Elderly care is one of the most urgent issues in Hong Kong, and developing Guishan Island has an immediate effect on this matter. By using the MiC

technique, tens of thousands of elderly units can be built within the year. The island will be gradually equipped with specialist clinics, senior technology research and development center. Combining the existing land on the island to the new land obtained from reclamation, there will be an area of 10 km² for building elderly communities. This is sufficient to meet the long-term needs of the elderly society for elderly care and medical care service.

Since the elderly and workers of that industry do not need to commute frequently to the city, the elderly communities can be constructed simultaneously with the "Guishan Island-Lantau" bridge. Before the bridge/tunnel is built, the residents in the elderly community can commute to different districts by water. The existing terminal facilities on Guishan Island can be gradually improved, with high-speed passenger and freight ships going back and forth Central, Tsim Sha Tsui, Tsuen Wan, Tuen Mun, Tung Chung and surrounding cities, the daily needs of the people on the island can be fulfilled. The rough estimation of the commuting time to Tung Chung is 20 minutes; to Tuen Mun, Tsuen Wan, Tsim Sha Tsui and Central is within half an hour.

The 10-square-kilometer elderly community on Guishan Island can accommodate hundreds of thousands of elderly and related personnel, even if half of the land is reserved for green belts and marine parks. Not only does it serve a large population, it can also be put into service quickly. Since land leveling will not take long, it is expected that the first batch of residents can move in between 2021 and 2022. Thereafter, the elderly communities will be expanded through reclamation.

The first phase of the project also includes the construction of the connecting bridge from the northeast corner of Guishan Island to the southwest of Lantau Island (diversion area). The bridge is a five-kilometers "road-rail" dual-use bridge. The connecting bridge leads to the diversion area, then to coastal road or through mountain tunnel, and can connect to Tai O. Currently, Tai O is only connected to the "South Lantau Road", which is weakly connected to the North Lantau transportation system. It is complicated and time-consuming travelling to and from Tung Chung and urban area. We suggest the road and railway system of Tung Chung to be extended westward to Tai O, such that a ring road network can be formed in the east, west, south and north of Lantau, that also allows the traffic and people flow of Guishan Island to go north through the "Tung Chung Transport Hub".

The Task Force On Land Supply established by the current government has also considered finding land to build a port in order to maintain the competitiveness of relevant industries, and cited several conditions:

01

According to international standards for port facility, each berth provides 25 hectares of container yard to support terminal operations; the water depth of the new location must be at least 17.5 meters below the baseline to allow large ships to berth;

02

According to the size of current container ships, the length of the berth shall not be less than 400 meters;

03

The waterway must have sufficient water depth;

04

Before relocating, it is necessary to predict the freight volume to determine the number of berth and whether it needs to be expanded in the future;

05

The new port must be closely connected to the main areas of Hong Kong, including the relevant strategic sea and land transportation network;

06

Due to the large demand for land area, reclamation is very likely needed.

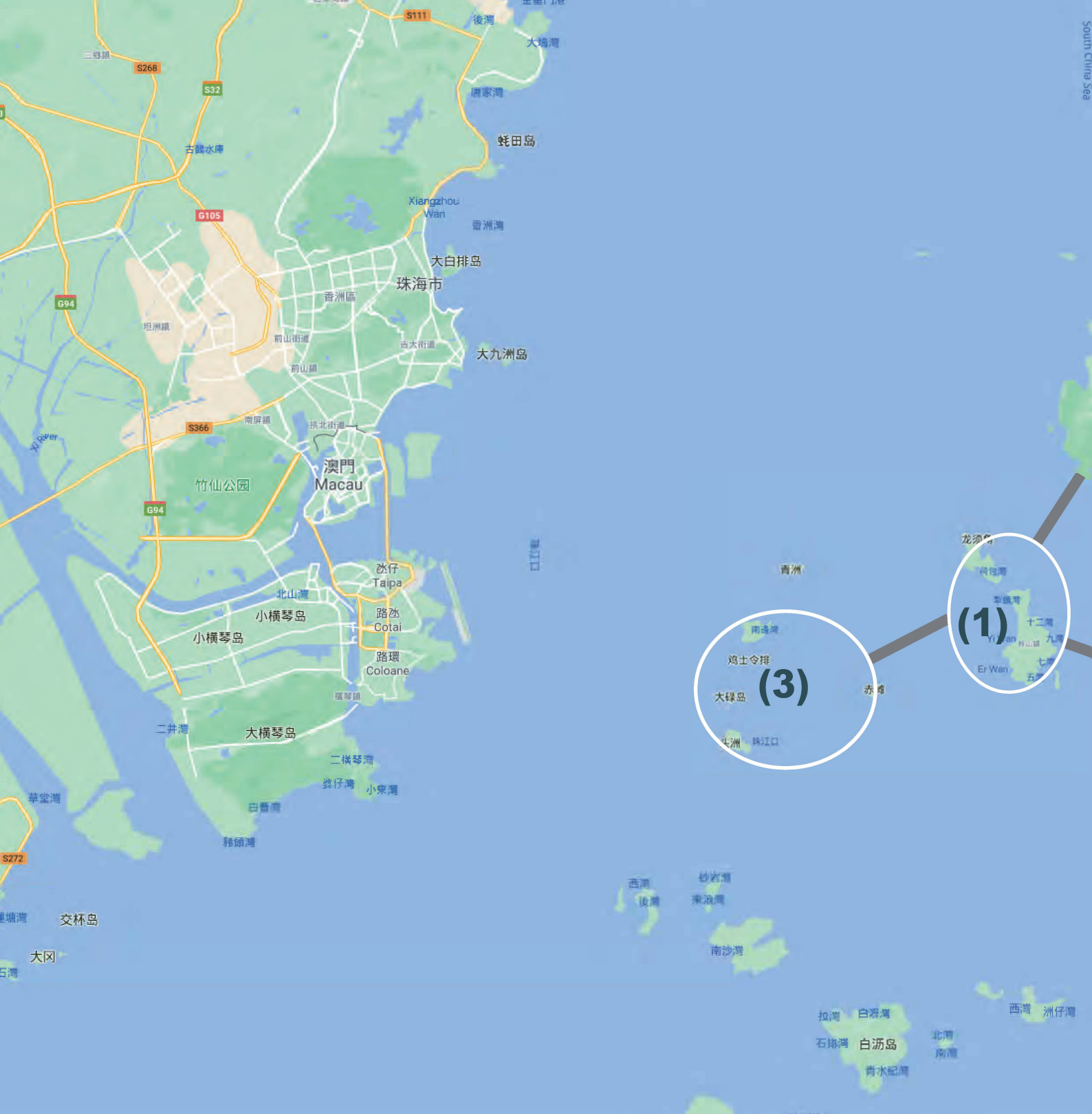
Phase I: Correctional facilities and container terminals

We suggest that correctional facilities and the Kwai Tsing Container Terminal should be relocated on Guishan Island, so that the relevant facilities currently scattered over Hong Kong can be integrated and a large amount of land in developed area can be vacated. The land can be repurposed for residential, commercial, business and public service use, to ease the problem of overcrowding and insufficient developmental space.

The "prison clusters" under the jurisdiction of the Correctional Services Department will be gradually moving from the urban area to the island in ten years' time, starting with correctional facilities and drug rehabilitation centers, from minimum-security to medium-security, then to maximum-security prisons. Except for a small part of the old prison facilities, most of them will be demolished and converted into public and private housing.

After the container terminal was relocated on the existing land on Guishan Island, nearly three-square-kilometer precious space in Kwai Tsing can be vacated, and used for other purposes. Furthermore, the development of the Guangdong-Hong Kong-Macao "smart logistics" industrial zone can become "shipping-aviation" hub for the entire "South China-South China Sea". The land reclaimed along the west bank of Guishan Island can be used as a land reserve for the construction of a "cargo airport" and "railway system." The reclamation and expansion of Guishan Island will consolidate the strategic role of local enterprises and talents in the logistics industry in the region. At the same time, it will also become a powerful carrier for the high-growth business of "smart logistics".



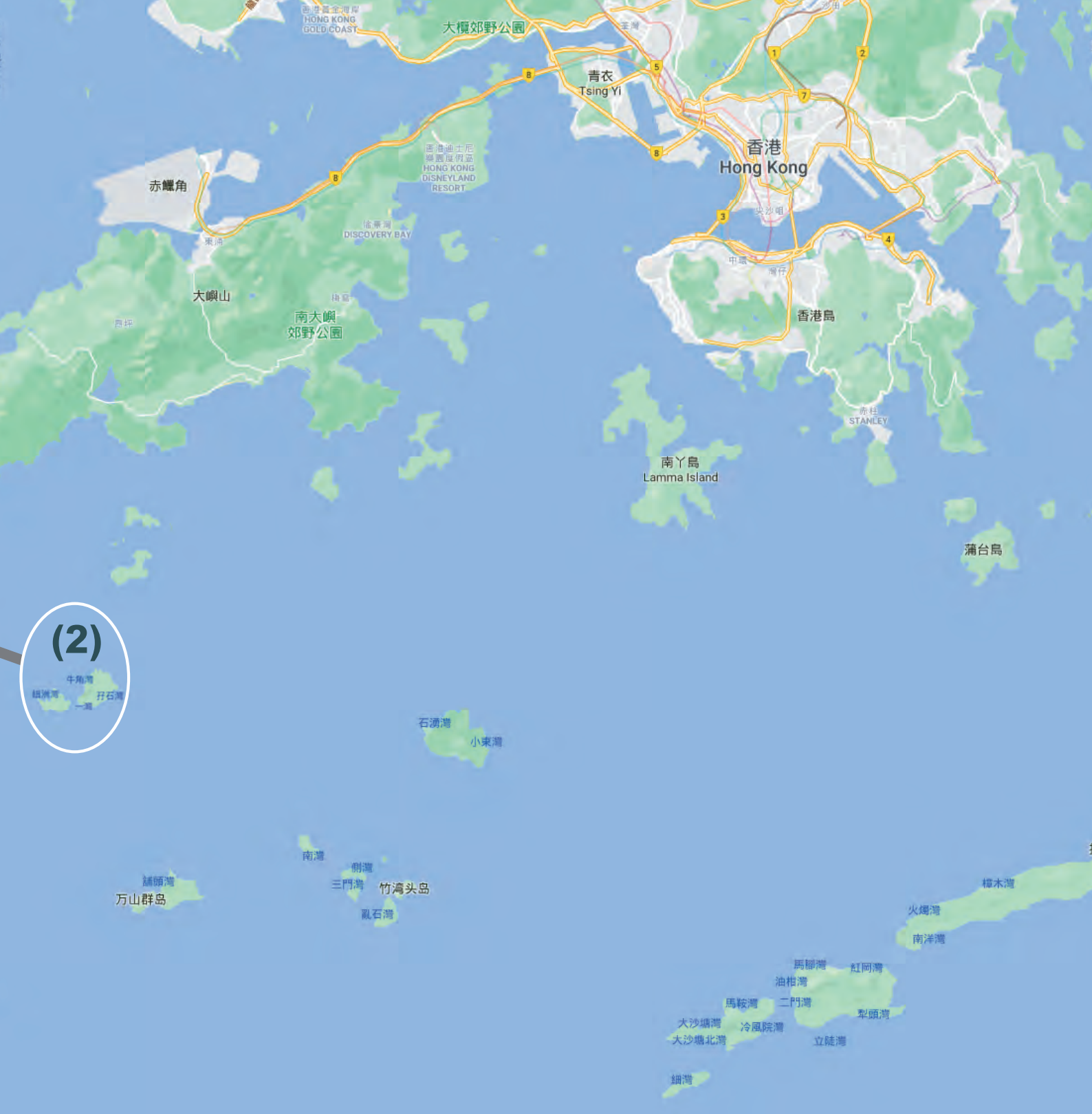


(1) 桂山島 - 20平方公里：安老醫療 智能物流

(2) 大、小蛛洲 - 20平方公里：文創 教育

(3) 青洲、三角山島 - 30平方公里：科創

****總獲地70平方公里 供80萬市民安居樂業 業權均霑****



- (1) Guishan Island - 20km²** : Medical and Elderly Care, Smart logistics
- (2) Dazhuzhou, Xiaozhuzhou - 20km²** : Cultural Innovation, Education
- (3) Qingzhou, Sanjiaoshan Island - 30km²** : Technology and Innovation
- **a total of 70 km² of land to accommodate 800,000 people****