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Better Housing for Society

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On 17th January this year, just 6 days before the Chinese New Year, an elderly woman died in a freak accident after she was hit by a falling window in Yau Ma Tei. Police said the woman, aged 70, was walking along Nathan Road and she was struck by the falling window, still in its frame, outside Ping On Building at about 2:30pm. She suffered serious head injuries and was already in a coma when she arrived at Queen Elizabeth Hospital. She was pronounced dead soon after.

5 days later, on 21st January, a similar accident killed an 87-year-old man at Western District, when the man was walking on the pavement outside the building at No. 16-20 North Street.

On 25th January, it was reported that 3 windows dropped to the street on the same day. As the subject becomes topical, continuous incidences of falling windows have been reported at the rate of about one per day.

For those of us who are involved in the building management and maintenance to hear about windows or external wall coverings or other appendages falling off buildings is not uncommon. The two incidents above, involving people killed, demonstrate the problems with our housing stock. In the consultation paper on the Hong Kong 2030: Planning Vision and Strategy Study, issued by the government on 25 November 2003, it was stated that Hong Kong should be positioned as "Asia's World City". In many aspects, Hong Kong is already a World City. For just the first three quarters last year, Foreign Direct Investment (FDI) to Hong Kong amounted to HK\$115 billion, the second largest recipient of FDI in Asia, after the Mainland ¹. In Year 2003, Hong Kong has attracted 16.5 million tourists ².

To be a World City, Hong Kong must be a safe place. Safety not only in the sense of low crime rate, but also in the safety of our buildings and other hardwares. Safety not only to the tourists, but also to the local residents. To keep up the standard of our building stock, building management and maintenance are of paramount importance.

Although housing is a universal topic in Hong Kong, attention paid to building management and maintenance had not matched up to this level. This is puzzling, because we rely on management and maintenance to ensure that buildings remain structurally sound and watertight, that refuse is removed, public areas cleaned and security maintained. All of us experience the consequences of maintenance and management. We depend on them for supply of water, electricity, gas, and for waste disposal, etc. We pay for them as residents. Homeowners need them to maintain the value of property. Yet achievements in management and maintenance are rarely celebrated, failures are haphazardly addressed and their future progress rarely is discussed. We at the Hong Kong Housing Society would like to see that changed.

Why take the trouble? Well, apart from the impact on our safety and quality of life, property is a major factor in the economy of Hong Kong.

In 2002, about 25% of all Hong Kong investment was in property ³. Hong Kong banks have a significant portion of their lending in property assets. This was close

to 50% in 2002. For most people in Hong Kong, their home is the greatest investment in their lifetime.

Private sector housing production has increased from 18,000 units in 1997 to 30,000 units in 1999⁴. The following tables show the total stock of private housing units in Hong Kong at the end of 2002.

Age of Units	No of Units		Estimated Value	Population
(Year)	('000)	%	(\$ billion)	('000)
over 45	46	3.1	50	134
35-44	164	10.8	189	476
25-34	221	14.5	334	641
15-24	420	27.6	750	1,221
5-14	471	31.0	927	1,371
under 5	197	13.0	407	573
Total	1,519	100	2,657	4,416

Table 1 – Breakdown of Housing Stock by Age Groups

Table 2 - Cumulative Housing Stock by Age

Age of Units	No of Units		Estimated Value	Population
(Year)	('000)	%	(\$ billion)	('000)
over 45	46	3.1	50	134
over 35	210	13.9	239	610
over 25	431	28.4	573	1,251
over 15	851	56.0	1,323	2,472
over 5	1,322	87.0	2,250	3,843
Over All	1,519	100	2,657	4,416

(Analysis based on Table 7.15 of HK Annual Digest of Statistics 2003-App.E)

The total value of our housing stock amounts to HK\$2,657 billion. Our estimate is that the difference in value between properties with and without good management and maintenance ranges from 10% to 30%. If we take the mean of 20%, then good management and maintenance will help to increase the value of these properties by an amount of HK\$530 billion. In other words, without proper management and maintenance, this amount will be evaporated and the loss to the 4.4 million people living in these units will be HK\$120,000 per person or \$360,000 per family, taking an average family size of 3.

In 10 years' time, the number of buildings with an age of 25 years and above will grow to 850,000 units or 56% of our stock (as of today). If nothing is done in the very near future, the problem will grow by geometrical progression. This is a serious matter.

The above is just a financial assessment of the importance of management and maintenance. We have to also take into consideration the deterioration in the quality of life of the people living in these buildings. Quality of life includes the hygiene conditions and state of health, as demonstrated by the tragic outbreak of SARS.

What are the chances of redevelopment to these buildings? Most of the buildings less than 30 years are built to the maximum plot ratio permitted under the Building Regulations or planning control. The trend now is to generally reduce plot ratio to achieve a better living environment.

We have carried out an assessment and come to the conclusion that in order for a building to be feasible for redevelopment, the increase in permissible floor area must be at least 75%. There are not many buildings in Hong Kong today, which can be redeveloped to a density 1.75 times the existing bulk. This situation is accentuated in the consultation paper Hong Kong 2030, where government stated the intention to lower the development intensity.

For the few buildings, for which redevelopment is feasible, it is likely that most of them are in multiple ownership. To redevelop buildings in multiple ownership by the owners themselves is almost impossible, as multiple ownership in Hong Kong take the form of "tenants in common". This legal form of ownership creates intricate problems, as it requires 100% of the ownership to come to an agreement before redevelopment can take place. Without going into details, the following are just some of the hurdles relating to joint redevelopment by the owners:

- 1. agree on the share of each owner in the redevelopment
- 2. some units may be subject to long leases and vacation of the tenants may call for substantial compensation, or delays, or both
- 3. the willingness (financial, personal, social and otherwise) of the owners to move out to temporary accommodation during the redevelopment period
- 4. the financial ability of the owners to redevelop
- 5. the lack of expertise of the owners to proceed with the redevelopment

I do not want to go on for too long but there are many other hurdles that make redevelopment of buildings in multiple ownership difficult even with assistance / back-up of private developers.

It is indeed the government's policy in preparing the brief for planning and land use studies to make the assumption that buildings with more than 10 owners are assumed to be incapable for redevelopment.

With the current setup of the Urban Renewal Authority (URA), the pace of urban renewal will still be slow due to various constraints.

However, Urban improvement can be achieved both by redevelopment and by rehabilitation or rejuvenation (the 4Rs that the government has been promoting). The Hong Kong Housing Society is already working on a number of urban renewal projects in association with the Urban Renewal Authority. But as a community, we should act by all the means to arrest the spiral of decline in areas where the market is not enabling orderly regeneration.

We need to anticipate future problems by extending the physical life of our existing buildings, in circumstances where the physical life outlives the economic life.

We also need to encourage the setting up of systems for management and maintenance early in the life of buildings, to ensure that they continue to provide the best environment and retain as much of their value as possible. This will take new thinking combined with established expertise.

This needs to start with research from first principles. We should not be relying on foreign experience because Hong Kong has its own distinctive systems of construction and management. Perhaps only here in Hong Kong are towers so commonplace. We can't look to foreign expertise to identify and deal with such issues because the evidence is here. My estimate is that at least 5 million people, over three quarters of the population, are living in high-rise buildings. It is important to general well-being and social stability that the quality of life in these buildings is maintained.

Management & Maintenance Issues

a. Structure

In terms of structure, Hong Kong high-rise typically uses high strength structural concrete [often mixed on site until the mid '90s] with high tensile steel and minimal coverage. Built according to the best available information

at the time, we don't know how well this formula has coped with the challenge of our warm wet climate, high salinity, unusually slender towers and occasional high wind loads.

A total of 69 injuries from unsafe building parts over the past 3 years suggest that integrity is not guaranteed when management or maintenance are skimped. The best way to prevent more serious collapse is to investigate how tall buildings in Hong Kong perform in practice. This is a task that only we in Hong Kong should and can do.

b. Fabric

Materials and details do not necessarily behave in the same way when transposed from low to high-rise. Mosaic has been known to fall off tall buildings. Aluminium windows set in concrete walls become sensitive to detailing and workmanship when exposed to high winds and corrosion. Despite the prevalence of these materials, we don't know how many recent buildings leak, even though nothing undermines the maintenance of interior finishes, the well-being of users and the value of property more than ingress of water.

c. Layout

We don't know much more about the performance of Hong Kong housing in terms of format and layout. Market forces are not self-regulating in this respect. The very high property prices in the 15 years before 1997 produced units, which are very tiny. Consequently many of the fire protection features incorporated in the design have been abused or even removed in order to gain an extra square foot. Such abuses could be potentially dangerous in case of fire. Hong Kong, as a society, can end up with its resources invested in assets which do not perform.

d. Building Services

Building services are undergoing profound change. We need to make sure that new buildings not only keep pace with current user expectations, but are flexible enough to adapt to future change.

e. Sustainability

It is prudent to take seriously the wider implications of sustainability. If we design buildings too tightly around current usage, we run the risk that they will become obsolete when conditions change. All building features have management and maintenance consequences, which need to be carefully considered at the design stage.

The convenience of energy consuming systems should not lead us to design buildings which cannot be occupied without them. The desire for visual neatness should not lead us to create buildings which are inflexible or where elements liable to failure are obscured or inaccessible.

The Hong Kong housing system has been efficient and cost-effective in establishing basic provisions in difficult circumstances. This may however be a good time to stand back and assess the scope for further improvement.

Hong Kong Housing Society – The Housing Laboratory

The Hong Kong Housing Society is well placed to address such housing maintenance and management issues. We have a unique role in Hong Kong housing. Although we act in co-operation with government and sometimes implement programmes initiated jointly with them, we are not a government department. We are a non-government organisation with a social conscience and our Mission is to serve the needs of the Hong Kong community in housing and related services, by providing innovative housing solutions.

We implement targeted programmes, very cost-effectively. In addition to our traditional role as a provider of social housing, we are currently dealing with issues ranging from urban improvement to progressive elderly housing. With experienced staff and established systems, we are also able to contribute to other, meagerly resourced fields, such as building management and maintenance.

I would like to highlight below 3 areas where the Housing Society is carrying out programmes to enhance building management and maintenance in Hong Kong

1. Research

With the unique features described in previous paragraphs, it is not surprising to find that nowhere else in the world has researches on the repair and maintenance of such buildings been carried out on what I labeled as "Hong Kong stereotype residential towers". The Hong Kong Housing Society intends to sponsor a comprehensive research on the repair and maintenance of such buildings. This will be done through an agency like the Construction Industry Institute – Hong Kong which was set up under the initiative of the Hong Kong Polytechnic University and the Hong Kong Housing Society. The research will be carried out by our local universities, consultancies and other institutions. Where necessary, overseas universities and research institutions will also be invited to participate.

It is hoped that the results of this research will come into the form that is "ready to serve". That is to say building owners will be able to make use of these research results for undertaking repair and maintenance of their buildings, although in most cases, the application of such results will have to go through qualified practitioners.

Carrying out this research may take quite a few years. After the completion of the initial research, further studies may have to be carried out as new technologies and new construction techniques develop. The results will be something that Hong Kong can be proud of and hopefully with the cooperation of building owners and managers, will enhance the quality of life of Hong Kong residents.

2. Documentation

The standards of management and maintenance in Hong Kong vary substantially, partly because some buildings have not appointed building managers and partly because the standards of the building managers also vary. To facilitate and enhance such standards, there are many organizations, which have produced documents like guidelines, codes of practice, etc as to how management and maintenance should be carried out. However, these are done on a rather piece-meal basis.

These documents are not complete and there are gaps in practice, which are not covered by such documents. The Hong Kong Housing Society has begun consolidating and editing these documents with the aim to produce a comprehensive code of practice, guidelines, good procedures and standard forms of contracts for the management and maintenance of buildings. Examples of these documents are specifications for appointment of lift contractors, contracts for appointment of building managers, etc. After this set of documents has been completed, it will greatly facilitate building owners and managers.

In the compilation and editing of these documents, the Hong Kong Housing Society will work closely with the practitioners and the relevant government departments. It will be the joint effort of the industry and it is something that the industry will be proud of.

3. Area Centres

At the lower end of the housing market, there is great potential to raise standards but also a number of obstacles, particularly where there are currently no formal building management and limited resources, may constrain access to professional help.

To tackle this issue, the Hong Kong Housing Society will form Area Management Advisory Centres. These would be staffed with professional housing managers and building surveyors, who would be able to provide free information, advice and assistance; although we will not normally actually carry out management and maintenance work.

These Area Centres will assist owners who are conscious of the need for and keen to implement better building management and maintenance. For those building owners who could not care less about management and maintenance of their buildings, I am afraid that there is little the Housing Society could do. We will have to leave it to the government to legislate for mandatory building management – a subject which is currently under debate after government issued the consultation paper on Building Management and Maintenance.

Looking ahead

The Hong Kong Housing Society has longstanding concern for and expertise in building maintenance and management. This is already integral with our activities but also has the potential to become a focus in its own right. It offers a range of interlinked benefits in environmental and building quality to tenants, to owners and to society in general.

The Hong Kong Housing Society has worked consistently for the well-being of Hong Kong, by addressing housing and social needs. We foster innovation and the development of expertise and endeavor to respond opportunistically to fulfill needs unmet by the market and government. Conditions change but the needs, upon which we were founded to address, continue to exist. We are evolving to serve them in new and various ways. We remain a unique and cost-effective resource for housing in Hong Kong.

If we are able to achieve the three initiatives described above, we would be serving the vast majority of Hong Kong people. We will improve their living conditions in-situ, without uprooting their social network. We would also have helped to maintain the value of the greatest investment of most of Hong Kong residents. The Housing Society would have served its Mission and Vision.

We improve housing for society. We are Hong Kong's Housing Society.

Thank you.

Footnotes

- Press Release on Record Year on Investment Promotion issued by InvestHK,
 12 January 2004
- *2* Press Release on 12 January 2004 by Hong Kong Tourism Board
- *3* HKTDC. "Economic Forum", 2002
- 4 Table 7.12 of HK Annual Digest of Statistics 2003-App.C & HK Property Review – Monthly Supplement Jan/04-App.D

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