

**For discussion  
on 11 April 2006**

**LegCo Panel on Food Safety and Environmental Hygiene**

**The Proposed Sheung Shui Poultry Slaughtering Plant**

**PURPOSE**

This paper briefs Members the Administration's plan to develop a poultry slaughtering plant in Sheung Shui.

**BACKGROUND**

2. At the Panel meeting held on 14 March 2006, Members were informed that the Administration was actively exploring the development of a poultry slaughtering plant in Hong Kong to put together poultry slaughtering activities so as to achieve our policy objective of separating live poultry from humans as a means to prevent human infection of avian influenza.

**LATEST POSITION**

3. Subsequent to the Panel meeting, we have identified a suitable site and come up with a broad development programme for the slaughtering plant project. The latest developments are set out in the ensuing paragraphs.

**Location for the Proposed Poultry Slaughtering Plant**

4. After conducting a site search, we have identified a site in Sheung Shui (a location plan is at Annex) suitable for development of the slaughtering plant. With an area of about 10,500 m<sup>2</sup>, the site is currently part of a works site occupied by the Kowloon Canton Railway Corporation for the development of the Spur Line, but is due to be returned to the Government in the latter half of 2007, subject to there being no delay in the commissioning of the Spur Line. The subject

location has the advantages of being close to the border and local poultry farms and of being well-served by an established transportation network. It is not in close proximity to major residential areas and is surrounded mostly by industrial buildings. The nearest residential area is over 200m from the plant. Basic infrastructure such as water and electricity supply and sewage network is readily available. In identifying the location for the plant, the Government has taken into account various relevant factors to avoid causing inconvenience or nuisance to the residents.

### **Mode of Operation of the Proposed Poultry Slaughtering Plant**

5. It is the Government's intention to have the plant developed and operated by the private sector since poultry slaughtering business is essentially a commercial activity. We envisage that the plant will be developed by the private sector selected through open tender under a Build, Own, Operate and Transfer arrangement (BOOT). Under the BOOT model, the private operator selected would be responsible for designing, financing, building and operating the plant for ten years plus five-year optional extension. After that, the plant will be transferred to the Government at no cost and in good condition. The Government will then conduct a fresh tendering exercise for the operation of the plant. We will draw up the details regarding the commercial and operational arrangements for the plant later this year.

6. To cater for consumer needs, we expect that the slaughtering plant will operate throughout the year with a daily slaughtering capacity of 20,000 – 40,000 live chickens and a maximum of 3,000 pigeons and other small sized poultry except water birds with the capacity for expansion to slaughter 60,000 live chickens. Lorries with crates of live chickens and other poultry will go to the slaughtering plant direct from across the border or local farms. The slaughtering process will start after midnight. Dressed poultry will undergo a chilling process and be individually packed and tagged before distribution to retail outlets by enclosed refrigerated vehicles.

7. We expect that most of the slaughtered chickens will be chilled, but it would be a matter for the operator to assess the technical feasibility and the market situation at that time to decide whether or not to

provide freshly slaughtered chickens in addition to chilled chickens. To compete with imported chilled chickens and to enhance the financial viability of the plant, the plant operator will have to establish a market niche and a well-established brand name for the slaughtering plant products.

8. To provide opportunities for others to participate in the future poultry supply chain, the plant operator will be required to reserve sufficient capacity for the slaughter of chickens produced by local poultry farms. The plant operator will also be required to provide on request and at charge poultry slaughtering service for importers of poultry from the Mainland or buyers of local poultry. At the tendering exercise, bidders will be required to set out their proposed slaughtering fee to be charged to the importers and buyers. Favourable consideration will be given to bids with lower slaughtering fee. The importers or buyers may be former wholesalers or retailers who choose to re-engineer their business under the new operating environment. We will include provisions in the tender documentation to require the plant operator to treat all importers and buyers on an equal footing.

9. We note that the plant operator will have to shoulder considerable business risks arising from the disruption of supply of live chickens caused by avian influenza outbreaks. Also, the operator will have to face keen competition from the Mainland in the supply of chilled chickens. To enhance the financial viability of the project, we will charge the plant operator only a nominal rent of \$1 per year for use of the identified Sheung Shui site. Besides, the lease offered to the plant operator will be extended by a period of time equivalent to the cessation period of plant operation as a result of outbreak of avian influenza during the lease period.

10. We have no pre-conceived ideas on the number of slaughtering plants that should be provided in the territory and consideration would be given to the development of a second slaughtering plant if there is sufficient market demand.

## **Planning for the Proposed Poultry Slaughtering Plant**

11. We will conduct an environmental impact assessment study on the project in accordance with the Environmental Impact Assessment Ordinance (Cap. 499). In parallel, we shall initiate a zoning amendment to the Fanling/Sheung Shui Outline Zoning Plan pursuant to the Town Planning Ordinance (Cap. 131). Legislative proposals will also be drawn up to put in place a licensing regime for the operation of the plant and to require poultry traders to deliver both local and imported live poultry to the slaughtering plant direct without passing through the existing wholesale poultry market.

12. After drawing up the broad development parameters, we shall invite expressions of interest (EOI) with a view to ascertaining the market interest in the project and gather views of prospective operators on the operational and commercial arrangements for the project for our reference in drawing up the tender documentation. Our target is to conduct the EOI exercise within 2006. A formal tender exercise will then be conducted to invite bids from the private sector. Given the considerable amount of preparatory work involved, we expect the earliest possible timing for the proposed slaughtering plant to come into operation would be 2009.

## **Ban on the Retail Sale of Live Poultry**

13. Upon the operation of the proposed poultry slaughtering plant, the sale of live poultry in retail outlets will be prohibited. This has been and will remain to be the primary purpose for developing poultry slaughtering plant to achieve our policy objective of minimising as far as practicable the contact between humans and live poultry in order to reduce the risk of human infection of avian influenza. Legislative amendments are necessary to effect the implementation of the ban. The timetable for the ban may be advanced in the event of any outbreak of avian influenza in the territory.

## **Impact on the Poultry Trade**

14. While business opportunities will be available for existing

traders under the new operating environment, there will inevitably be certain impact on the trade as follows –

(a) Poultry farmers

Poultry farmers may continue to rear poultry and they may sell their poultry to the slaughtering plant or buyers. However, there is likely to be stiffer competition with Mainland chilled chickens and local farmers may need to make extra efforts to build up Hong Kong brand name.

(b) Wholesalers

Live poultry will be brought to the slaughtering plant direct without any need to pass through Cheung Sha Wan Temporary Wholesale Poultry Market. Live poultry wholesalers may switch to operate as buyers for poultry from local farms or importers for sourcing chickens from Mainland farms for retailers/restaurants and co-ordinate transportation arrangements, etc.

(c) Transporters

Other than transporting live chickens, transporters may opt to change their business to transporting chilled chickens, frozen chickens or other goods.

(d) Retailers

Live poultry retailers may switch to sell chilled and/or frozen poultry. The Food and Environmental Hygiene Department will consider applications for endorsement to sell chilled and/or frozen poultry.

(e) Workers

Some of the poultry trade workers will remain in job should their employers choose to re-structure their business under

the new operating environment. For those who become unemployed, the Labour Department will accord priority to assisting them in finding alternative employment.

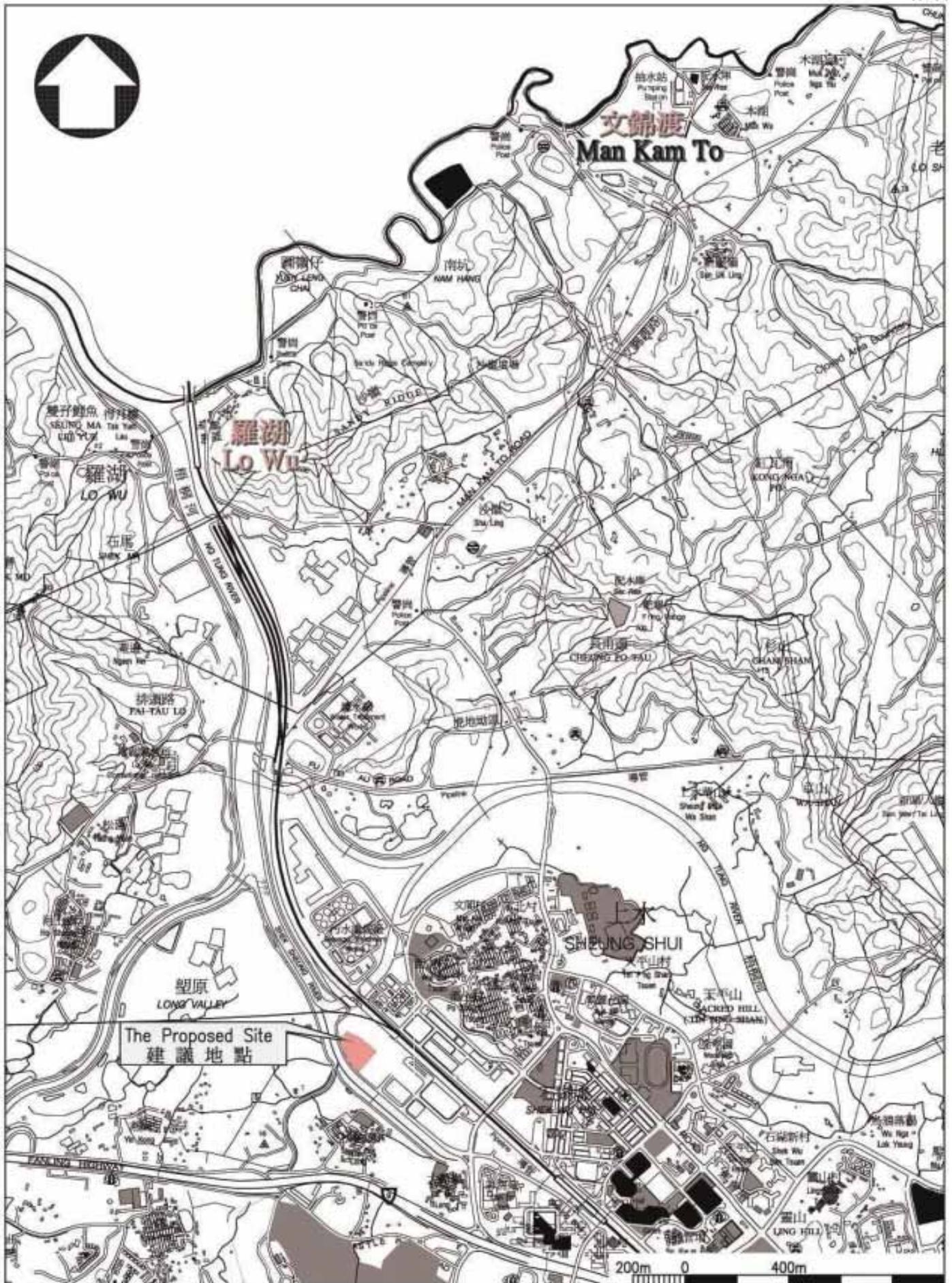
## **WAY FORWARD**

15. The preparatory work for the proposed poultry slaughtering plant project as outlined in paragraphs 11 and 12 above aside, we shall consult the North District Council on the project on 6 April 2006. We shall also liaise with the live poultry trade and address their concerns as appropriate.

## **ADVICE SOUGHT**

16. Members are invited to express their views on the proposed development of a poultry slaughtering plant at Sheung Shui and the broad development programme for the project.

**Health, Welfare and Food Bureau**  
**April 2006**



title PROPOSED SITE FOR CONSTRUCTION OF POULTRY SLAUGHTERING PLANT IN SHEUNG SHUI - LOCATION PLAN 在上水興建家禽屠宰場 - 擬建位置圖	drawn by BILLY CHOW	date Feb,2006	drawing no. XA001	scale 1:20000
	approved JOE LAM	date Feb,2006	 ARCHITECTURAL SERVICES DEPARTMENT	
	office ARCHITECTURAL BRANCH			

**Consultancy Study on the Commercial Viability for  
Private Sector Involvement in the Poultry Slaughtering Plant at  
the Western Wholesale Food Market**

A summary of major findings of the study is as follows –

Consumption Trend

- The number of live chickens consumed in Hong Kong has dropped from about 100,000 per day in 2000 to 60,000 in 2005 due to the impact of the quota on importation of live chickens and the supply of chilled chicken from the Mainland.
- Chilled chicken has been gaining popularity in Hong Kong.
- Based on historical trends, the overall chicken consumption is expected to grow with the population.

Research into International Experiences

- Governments in the seven countries studied, namely Australia, the Mainland, France, Singapore, Thailand, the United Kingdom and the United States, are not direct market players in the live poultry slaughtering business. They only play a regulatory role in the public health and food hygiene aspects.
- It is not a common practice for governments to offer financial incentives to the private sector for the operation of slaughtering plants. However, some governments provide financial relief to the slaughtering plant operators in the event of outbreak of avian influenza.

Assessment of Market Interest

- A number of players in the poultry industry have expressed interest in operating the slaughtering plant. However, most of them would only be willing to invest in the infrastructure for the slaughtering plant should there be a clear government policy to phase out the

retail sale of live poultry or financial assistance be provided.

### Business Models and Financial Analysis

- Two business models have been examined –
  - (a) Concession model – Government is responsible for designing, financing and building the plant and owns it. The private operator is only responsible for operating and maintaining the plant.
  - (b) BOOT model – The private operator is responsible for designing, financing and building the plant. The operator owns the plant for a specified period of time and will have to transfer it to the Government thereafter.
- We have provided two policy scenarios for the purpose of financial analysis –
  - (a) Natural phasing out of the existing live poultry retail outlets. Under this scenario, the number of retail licences remains at the same level in 2006 and 2007, while there will be a 30% decrease each in 2008 and 2010 triggered by the commencement of the first and the second plant, and gradual decrease thereafter. The demand for chickens from the slaughtering plant is forecast to be low. Daily output per slaughtering plant is assumed to be 24,000 in year 2008 and 27,000 in year 2017.
  - (b) Compulsory forcing out of the existing live poultry retail outlets after the second slaughtering plant comes into operation in 2010. Under this scenario, a large number of retailers surrender their licences in 2008 when the first slaughtering plant opens, followed by another rush of surrender in 2009 before the end of the grace period. The demand for chickens from the slaughtering plant is high. Daily output per slaughtering plant is assumed to be 36,000 in year 2008 and 40,000 in year 2009.
- The ex-factory selling price to retailers of chickens slaughtered and

processed by the privately-owned plant is estimated to range from \$35 to \$45 representing 10% to 30% discount from the current retail price of fresh chickens less the 10% retailer margin. These prices are set between the existing retail price for chilled chickens at wet market which is around \$33 and the retail price of freshly slaughtered chickens which is around \$55 less the 10% margin currently earned by retailers.

- The consultant has conducted financial analysis of six scenarios and found that the internal rate of return under the BOOT model ranges from 18% in the worst case scenario of low demand low price to 150% in the best case scenario of high demand and high price. Except for the worst scenario, the other five scenarios, will generate sufficiently high returns to attract private developers. The assumptions used in the analysis are -
  - Slaughtering process utilises modern technologies, which aims to be efficient and hygienic.
  - The plant is designed to slaughter 20,000 to 40,000 chickens per day.
  - Plant is located on premises owned by the Government located at the Western Wholesale Food Market with a monthly market rental of \$75 per square metre.

The plant is assumed to have 70 staff with an annual staff cost of about \$13 million.

- BOOT model is recommended since it can achieve better savings and benefits to both the Government and the private operator and would likely result in an appropriate allocation of risk between the Government and the private operator.

### Success Factors

Some of the success factors of the slaughtering plants are –

### *Extent of Government Intervention*

- Government regulations on food safety and quarantine standards are and will be critical to provide consumers with basic assurance in the poultry products, and government's role in educating consumers on food safety will further accelerate the shift from the current live chicken retail model (i.e. wet market) to the freshly slaughtered model.

### *Structural Changes in Industry*

- The fully vertical integrated business model may help the pilot plant reduce production cost by eliminating the transaction cost incurred along the supply chain, and allow the operator to maintain maximum control on the quality of the product.

### *Elimination of the Live Chicken Retail Market*

- The government needs to take positive action to stop slaughtering of live chickens in wet markets. This would provide a more stable environment for the slaughtering plant to operate.

### *Stringent Control of the Supply of Live Chickens*

- In order to guarantee the quality and supply of live chicken from the Mainland, the Government will need to work closely and actively with the Mainland to put in place stringent control on the supply and management of live chickens, such as effective disease control and surveillance programmes and frequent inspections on the farms that have been approved to export poultry to Hong Kong.

### *Pricing of the Chickens*

- Given that chicken demand has shown to be very price elastic for wet market live chickens, it is necessary for freshly slaughtered chicken to be priced at a discount to enhance sales volumes.

### *Establishing a Market Niche*

- It is important for the plant operator to establish a market niche for the slaughtering plant products and motivate consumers to switch from wet market live chickens to the slaughtering plant products. To achieve this, chickens from slaughtering plant must be portrayed as having same degree of freshness (and hence a close substitute of

live chickens) while having better hygiene and food safety control. At the same time, they must be differentiated from imported chilled chickens through aggressive marketing, branding and consumer education.

*Cost of the Chickens*

- It is important to set up arrangement to secure live poultry at reasonable prices from Mainland live poultry suppliers to lower costs and hence maintain a healthy profit margin as well as in stable quantities.