

**立法會**  
***Legislative Council***

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**LegCo Panel on Housing**  
**LegCo Panel on Planning, Lands and Works**

**Minutes of the joint meeting**  
**held on Monday, 6 December 1999, at 4:30 pm**  
**in Conference Room A of the Legislative Council Building**

**Members present** : Members of Housing Panel

Hon LEE Wing-tat (Chairman)  
Hon Gary CHENG Kai-nam, JP (Deputy Chairman)  
Hon David CHU Yu-lin  
\* Hon HO Sai-chu, SBS, JP  
Hon NG Leung-sing  
Hon Mrs Selina CHOW LIANG Shuk-ye, JP  
\* Hon James TO Kun-sun  
Hon CHAN Yuen-han  
Hon LEUNG Yiu-chung  
Hon Andrew WONG Wang-fat, JP  
Dr Hon YEUNG Sum  
Hon SZETO Wah

Members of Planning, Lands and Works Panel

Hon Edward HO Sing-tin, SBS, JP (Chairman)  
Hon TAM Yiu-chung, GBS, JP

**Members attending** : Hon Cyd HO Sau-lan  
Hon Martin LEE Chu-ming, SC, JP  
Hon HUI Cheung-ching  
Hon LAU Kong-wah  
Hon Emily LAU Wai-hing, JP  
Hon CHOY So-yuk  
Hon Andrew CHENG Kar-foo  
Hon LAW Chi-kwong, JP

**Member absent** : Members of Housing Panel

Hon Albert HO Chun-yan  
Hon LEE Cheuk-yan  
Hon Fred LI Wah-ming, JP  
\* Hon Ronald ARCULLI, JP  
Hon CHAN Kam-lam

Members of Planning, Lands and Works Panel

Dr Hon TANG Siu-tong, JP (Deputy Chairman)  
Ir Dr Hon Raymond HO Chung-tai, JP  
Hon WONG Yung-kan  
Hon LAU Wong-fat, GBS, JP  
Hon Timothy FOK Tsun-ting, SBS, JP

(\* Also members of the Panel on Planning, Lands and Works)

**Public officers attending** : **Works Bureau**

Mr W S CHAN, JP  
Deputy Secretary (Works Policy)

Mr T N CHENG  
Chief Assistant Secretary (Programme Management)

**Territory Development Department**

Mr H K WONG, JP  
Director

Mr C G GO, JP  
Project Manager/New Territories East

Mr D J CLIMAS  
Deputy Project Manager/New Territories East

**Drainage Services Department**

Mr J COLLIER, JP  
Director

Mr C H LAM  
Assistant Director/Sewage Services

**Civil Engineering Department**

Mr David James HOWELLS, JP  
Assistant Director (Geo)/Mainland

**Planning, Environment and Lands Bureau**

Mr Geoffrey WOODHEAD  
Principal Assistant Secretary (Buildings)

**Lands Department**

Mr R P POPE, JP  
Director

**Buildings Department**

Mr C M LEUNG, JP  
Director

Mr K K CHOY  
Assistant Director/Structural Engineering

Mr K H HUI  
Chief Structural Engineer

**Housing Bureau**

Mr H W TIN  
Principal Assistant Secretary (Project Management)

Miss Sandy CHAN  
Principal Assistant Secretary (2)

**Housing Department**

Mr John CHIU  
Project Director/East

Mr C T WONG  
Chief Architect 2

Ms Peggy CHAN  
Chief Estate Surveyor/Rental Housing and  
Private Sector Participation Scheme

Mr Michael H K SHUM  
Senior Geotechnical Engineer/Management 1

**Attendance by invitation** : **Rich Fortress Limited**

Mr Herman YU Yiu-chung  
Assistant General Manager

**Talent Luck Limited**

Mr Frank SETO Kai-shui  
General Manager

Mr Edmond SZE Tak-man  
Acting Development Manager

**Clerk in attendance** : Mrs Mary TANG  
Chief Assistant Secretary (1)6

**Staff in attendance** : Miss Becky YU  
Senior Assistant Secretary (1)3

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## **I Election of Chairman**

At the request of members, Mr LEE Wing-tat took the chair for the joint meeting.

## **II Problem of site settlement in housing estates in Tseung Kwan O** (LC Paper Nos. CB(1) 501/98-99(01), 529/99-00(01), (02), (03) and 531/99-00)

2. The Director of Territory Development (DTD) briefed members on the information paper (LC Paper No. CB(1) 501/99-00(01)) setting out the latest position of the unusual settlement in Tseung Kwan O (TKO) Industrial Estate, TKO Area 86 and TKO Town Centre. He said that the Hong Kong Industrial Estates Corporation was undertaking its own investigation with the support and assistance from the Territory Development Department (TDD) to ascertain the causes and effects of the unusual settlement in TKO Industrial Estate. The Mass Transit Railway Corporation (MTRC) had also completed extensive investigation and installed instrumentation to monitor the ground conditions in TKO Area 86. As regards TKO Town Centre where Tong Ming Court and Beverly Garden were located, DTD advised that the rate of settlement in the affected area had significantly reduced since August 1999. The total settlement recorded ranged from zero

in the north to 80 mm in the south of Beverly Garden. The situation in Tong Ming Court was even better where zero settlement had been recorded. Although the preliminary assessment by the Buildings Department (BD) concluded that buildings in the affected area were structurally safe, TDD and BD had written to developers and Authorized Persons (APs) respectively requiring them to investigate the impact of the unusual settlement on their developments. To enhance transparency, data on ground settlement had been provided to Owners' Committees of the estates concerned. DTD assured members that a report on the actual causes of unusual settlement would be submitted to the relevant Panels upon completion of the investigation.

### Causes of settlement in TKO

3. Ms Cyd HO remarked that ground settlement was not uncommon in TKO as in the case of On Ning Garden. She asked if the Administration had devised a procedure to determine the suitability of reclaimed land for construction of superstructure taking into account the unstable nature of the land and the experience learned from On Ning Garden. Extra precautions should also be taken in approving the construction of infrastructure such as extensions of the Mass Transit Railway and deep tunnels of Strategic Sewage Disposal Scheme (SSDS) etc in reclaimed land as this might aggravate the problem of settlement. In reply, DTD stressed that Hong Kong had extensive experience in respect of reclamation which was the most common method used in the formation of land. In general, an average of three metres of settlement would be expected in most reclaimed land. However, 90% of the settlement would have been achieved before construction works took place. The effect of the residual settlement would be taken into account in the design of foundations of buildings using bored piles. After completion of piling works, boreholes would be sunk to confirm the founding level of the piles. Monitoring stations would also be set up to ascertain if the actual rate of settlement conformed to that estimated at the construction stage of foundation. With the advancement in reclamation technology, measures such as installation of vertical drains in the marine deposit and formation of surcharge mounds on the reclaimed land would be used to speed up settlement. As regards Mr TAM Yiu-chung's concern about the effect of settlement on underground pipes, DTD advised that this could be overcome by installing flexible joints at the critical junctions of the pipes so that they could take up a certain amount of relative movement resulting from settlement.

4. The Chairman and Miss Emily LAU noted that at present, buildings were constructed after the land was reclaimed for only one year as opposed to five years in the past. They expressed concern about the structural safety of buildings if insufficient time was allowed for settlement to cease before commencement of construction. Given the great demand on supply of land, DTD emphasized that it was not feasible to leave reclaimed land vacant for five years to allow settlement to cease. Besides, there was no connection between structural safety of buildings and how long the buildings were constructed after the land was reclaimed so long as full consideration had been given to the effects of the downward force from settlement in the design of foundation of buildings. Moreover, as construction of superstructure would normally take more than three years to complete, this should allow sufficient time for settlement to take place.

5. On the effect of the construction of the SSDS tunnel from TKO to Kwun Tong on the unusual settlement in TKO, the Director of Drainage Services (DDS) explained that the six sewage collection tunnels under SSDS Stage I were built at depths of 85 to 150 metres below sea or ground surface to ensure a minimum rock cover of 30 metres to eliminate the risk of surface ground subsidence resulting from tunnel collapse during excavation. However, surface ground settlement might occur due to consolidation of soil layers overlying the bedrock if groundwater was lost to the tunnel and not adequately replenished from the surface. To limit such settlement and to ensure that buildings, structures, road or public utilities at ground surface of developed areas would not be affected, stringent requirements had been imposed on the amount of underground water allowed to enter into tunnels during excavation. Furthermore, 1,300 monitoring stations had been set up along the tunnel alignment to closely monitor the ground settlement in all developed areas. So far, no settlement had been reported. For the section of tunnels being built underneath the sea or undeveloped areas where no structures were likely to be affected, groundwater inflow was controlled to the extent that would allow excavation to be carried out safely and practicably.

6. As regards the SSDS tunnel from TKO to Kwun Tong, DDS advised that boring for the tunnel commenced from TKO side, crossed TKO Bay and ended at the seafront of Kwun Tong. Heavier water inflows into tunnel was found when the tunnel was underneath TKO Bay which was about one kilometre from TKO Town Centre where unusual settlement had been recorded. While it was possible that water inflows into the tunnel was a contributing factor to the unusual settlement, the actual causes of unusual settlement had yet to be determined pending completion of the investigation which would take about four months. As a precautionary measure, immediate steps had been taken to halt the inflow of groundwater into the tunnel. The lining of the tunnel at locations with relatively heavy inflow would be carried out in advance of the scheduled programme and would be completed by February/March 2000.

7. Ms Emily LAU enquired about the Administration's responsibility in the event that the unusual settlement in TKO was caused by the construction of SSDS tunnel. In reply, DTD reiterated that the actual causes of the unusual settlement had yet to be determined pending the results of the investigation. However, if it was later confirmed that the SSDS tunnel was a contributing factor to the unusual settlement, the Government would be liable under the Sewage Tunnels (Statutory Easements) Ordinance to compensate any person who had suffered loss or damage to land or property situated on land as a result of the construction of sewage tunnels. Mr Edward HO, Mr CHAN Kam-lam and Mr LAU Kong-wah enquired about the circumstances under which the Administration was not able to identify the actual causes of the unusual settlement. As geological changes could be detected by the present day technology, DTD was confident that the causes of the unusual settlement could be identified.

8. On the definition of unusual settlement, DTD explained that this referred to settlement in excess of the specified limit of predicted settlement by geotechnical engineers. In reply to Mr Edward HO's question on the acceptable level of settlement for reclaimed land, DTD considered it difficult to set such a standard since the extent of settlement would hinge on the nature of marine deposit on the seabed. As to whether

purchasers were aware of the risk of settlement in reclaimed land, the Director of Lands confirmed that when a lot on reclaimed land was put up for sale, the Administration would include in the lease conditions a clause stating that purchasers were aware that the lot was situated on a piece of newly reclaimed land and thus might be subject to normal residual settlement. However, purchasers might have a case against the Government in the event of unusual settlement. DTD assured members that the Administration would alert developers concerned if unusual settlement occurred so that the problem could be taken into account in the design of foundations of buildings.

9. To facilitate members' understanding, the Legal Service Division was requested to examine the Conditions of Sale of reclaimed land having regard to overseas experience to ascertain the allocation of risk between the Administration and the purchasers in the case of unusual settlement.

#### TKO Area 86

10. Mr NG Leung-sing was particularly concerned about the unusual settlement in TKO Area 86 since this was the place where the depot and a station for MTRC TKO Extension would be built. DTD advised that although construction works in TKO Area 86 had yet to commence, MTRC had taken into account the detailed records of extensive investigations on the settlement and groundwater levels in the area in designing their foundations. Moreover, these records had been made available to other developers and contractors with the consent of MTRC. Mr NG however remarked that unless TKO Area 86 had an indicative purpose on the extent of unusual settlement in TKO, the records provided by MTRC might not be useful. He pointed out that unlike other affected areas where high rise buildings would be built, TKO Area 86 was only intended for the construction of the depot and a station which were mainly low rise buildings. DTD advised that although the extent of settlement in TKO Area 86 was less serious than that in TKO Town Centre, they had the same level of groundwater loss. Besides, as MTRC intended to build superstructure on top of the depot, its design of foundation would provide useful reference to other developers.

#### TKO Town Centre

11. Dr YEUNG Sum remarked that apart from unusual settlement, owners of Beverly Garden were also concerned about the impact of the concrete cracks found inside their flats on the structural safety of the buildings. Mr CHU Yu-lin considered that the Administration should provide a statement on the safety status of Beverly Garden as opposed to other buildings with a view to alleviating the owners' concern. In response, the Chief Structural Engineer explained the foundation works of Beverly Garden. He said that boring was used in the construction of foundations for all the ten blocks in Beverly Garden. The bored piles were sunk to reach the underground rock layer which could withstand over 500 tons of force per square metre to ensure that the buildings would not be affected by the downward force from settlement of ground soil. The Director of Buildings (D of B) supplemented that following the report of unusual settlement in TKO in September 1999, the Buildings Department (BD) had conducted site inspections on Beverly Garden which revealed that no signs of damage to buildings had been caused by

the settlement, and that all the buildings were structurally safe. He assured members that BD would continue to monitor further development of unusual settlement in TKO and would liaise with the relevant parties with a view to resolving the problem. As regards the concrete cracks found inside the flats, DTD clarified that these were not caused by the unusual settlement and would not pose any structural danger to the buildings.

12. Mr Andrew CHENG expressed dissatisfaction at the poor workmanship of Beverly Garden and the delay in rectification works by the developer. He enquired about the responsibility of the Housing Authority (HA) in this respect. The Project Director/East (PD/E) explained that Beverly Garden was a Private Sector Participation Scheme (PSPS) project developed by Talent Luck Limited (TLL). Under PSPS, TLL obtained the land through open tender from the Government and was responsible for the design, construction and subsequent management of the project. TLL was also required under the Conditions of Sale to make good defects which might occur during the one-year Defects Liability Period (DLP) and scheduled defects for a period of five years upon the expiry of DLP. He stressed that HA did not have the liability for TLL's repair and maintenance obligations.

13. The Chairman asked which government department was responsible for the quality of PSPS flats. PD/E advised that under the existing arrangement, APs were required to submit building plans for approval by BD which would issue occupation permits. D of B however emphasized that BD was focusing on structural safety rather than workmanship of buildings. Mr Edward HO considered it necessary for the Administration to clarify the party responsible for the quality of flats at Beverly Garden. PD/E explained that the role of HA was confined to nominating eligible applicants to purchase the flats from the developer at a price determined by HA.

14. On rectification works, Mr Frank SETO/TLL advised that they had requested the contractor to follow up and make good defects reported before November 1999 despite that the DLP for Beverly Garden had expired in September 1999. As to whether HA would undertake to repair all the defects in Beverly Garden arising from the unusual settlement, the Principal Assistant Secretary for Housing (2) (PAS for H (2)) advised that under the Conditions of Sale, TLL was required to make good the defects, faults and damages caused by settlement for a period of five years upon expiry of the one-year DLP. HD would liaise with TLL if they failed to fulfil their obligations.

15. Ms CHAN Yuen-han noted that owners remained very concerned about the structural safety of buildings in Beverly Garden despite the Administration's assurance. To ease their concern, Ms CHAN urged HA to provide an indefinite liability period or a full buy-back guarantee for owners of Beverly Garden. PAS for H (2) reiterated that TLL had the liability to make good defects arising from settlement. On buy-back guarantee, PAS for H (2) pointed out that following the recent amendment to the Housing Ordinance, the buy-back period for both Home Ownership Scheme (HOS) and PSPS flats had been reduced from three to two years. The change aimed to encourage more HOS and PSPS flats to enter the secondary market for sale to sitting tenants with a view to releasing more public rental housing flats for re-allocation to those in genuine need. As to whether HA would consider offering owners of Beverly Garden a second chance to



purchase other subsidized home ownership flats if the situation of unusual settlement in TKO deteriorated, PAS for H (2) advised that under normal circumstances, owners of HOS and PSPS flats could not apply for further subsidized housing benefits after disposal of their flats to ensure rational allocation of public housing resources. However, she noted members' suggestion of considering the feasibility of a second chance for owners of Beverly Garden after a decision on the causes of unusual settlement had been made.

### The way forward

16. In view of the far-reaching implication of the unusual settlement in TKO, members agreed that the subject be discussed again upon the release of the investigation report. Meanwhile, Duty Roster Members would follow up the progress of the rectification works in Beverly Garden with the Administration, owners and management company and would report any new developments to the Panels.

### **III Any other business**

17. There being no other business, the meeting ended at 6:05 pm.

Legislative Council Secretariat  
6 March 2000