

THE HONG KONG HOUSING AUTHORITY

**Memorandum for the Building Committee
and Home Ownership Committee**

**Flooding at Mei Chung Court in Shatin Area 4D
Phases 1 and 2**

PURPOSE

Following the flooding at Mei Chung Court on 2 July 1997, the Department and the Private Management Agent (PMA) staff carried out emergency works followed by a detailed inspection by the Department's consultant to identify reinstatement works required within the Court. The purpose of this paper is to inform Members of the incident with particular reference to -

- (a) Causes of the incident.
- (b) Remedial actions and improvement works to be implemented by various parties.
- (c) Claims for damages.

BACKGROUND

2. Mei Chung Court (Shatin Area 4D) was designated for residential use under the Outline Zoning Plan.
3. According to a Geotechnical Area Studies Programme Report published by the Geotechnical Engineering Office, the site was located in an area that required intensive site investigation and high engineering cost for development. It did not say that the site where Mei Chung Court was built upon was unsuitable for development. Indeed a geotechnical assessment of the site had been made by the consultants of the Territory Development Department and found that the site was suitable for development.

4. Site formation was carried out and completed by the Territory Development Department in 1990 before the Housing Department took it over for public housing development. The design of the site formation had been submitted to the Geotechnical Engineering Office of the Civil Engineering Department for acceptance. The drainage system was designed to cope with development in the formed site. Any discharge of stormwater will eventually be carried away into the main stormwater drainage system downstream of Mei Chung Court. Geotechnical and drainage requirements stipulated in the Approved Planning Brief had been complied with (**Annex A** refers).

5. During construction of the housing development, geotechnical inspections were carried out by the Department's geotechnical engineer. The last inspection was in July 1996 and the slopes were found to be in a satisfactory condition. The Court was completed and occupied in mid 1996. Regular inspections of slopes within HOS courts would be arranged by the Department when needed on behalf of the owners.

6. There was exceptionally heavy rainfall on 2 July 1997. A natural streamcourse in an adjacent catchment was blocked by a footbridge which is about a hundred meters north of Mei Chung Court, causing overflow of flood water to the nearby footpath. The flood water, eroded the footpath, carried soil and debris, then spilled onto the slopes in Mei Chung Court causing serious slope erosions and flooding. Seventy cars within the level one of the carpark, estate facilities, all lift pits and the estate management office on ground floor of Fu Chung House were flooded and damaged in the event.

7. Immediately after the incident, the Department and PMA carried out emergency works including clearing of the blocked drains, pumping away water from carpark and lift pits at Fu Chung House, covering damaged slopes to prevent further infiltration and erecting sand bag barriers for temporary diversion of surface runoff away from the court boundary. The Works Bureau had coordinated various works departments to take up remedial measures in the public area outside the boundary of the Court and to identify follow-up actions. Currently, the owners of Mei Chung Court have formed a working group to claim for damages from the Government.

CAUSES OF THE INCIDENT

8. According to the investigation report by Works Bureau, flooding was caused by the abnormal flow of water from the stream outside Mei Chung Court and the blockage of the streamcourse at the footbridge, which was illegally widened, thickened for unauthorized vehicular access to the area, and added a mesh fence of about two meters high. Flood water found its way along the adjacent footpath, eroded the footpath, and rushed down into Mei Chung Court (Drawing at **Annex B** refers). The existing drainage system of the carpark in the HOS court was completely blocked by the tons of soil and debris washing down from the slope and footpath outside the court boundary.

REMEDIAL MEASURES INSIDE THE HOS COURT

9. Since part of the soil slope within Mei Chung Court was washed away by the flood water, the Department's geotechnical consultant has been immediately mobilized to carry out a detailed inspection to identify reinstatement works required within the Court. The following actions have been completed or are being arranged -

- (a) Emergency works to unblock the drains and clear the flooding by the Department and the PMA were completed shortly after the event.
- (b) Clearing of soil and debris, and temporary drainage measures to replace disrupted slope channels were completed by end of July.
- (c) Interim protective measures to eroded slope would be completed in 2 weeks.
- (d) Investigation and design of permanent reinstatement works are progressing. The permanent reinstatement works will be substantially completed by end of 1997.

The preliminary estimated consultant fees and cost of repair works will be about \$3.5M.

PROPOSALS OF IMPROVEMENT AND PREVENTIVE MEASURES

10. A delegation of Shatin Provisional District Board (DB) members and residents group was met by representatives from various works departments, District Office (DO) and District Lands Office (DLO), coordinated by Work Bureau on 30 July 1997. The following remedial measures have been agreed and are being implemented -

- (a) DO will build a temporary footbridge across the streamcourse for pedestrian use. Works has been completed.
- (b) Drainage Services Department (DSD) will demolish the existing footbridge and the mesh fence which had obstructed the streamcourse. It will also carry out some streamcourse training work and rebuild a permanent footbridge for pedestrian use within this year.
- (c) Highways Department (HyD) will repair the eroded footpath and the associated open channels. Work will be completed within this August.
- (d) After the repair and improvement, DO will maintain the footpath and footbridge.
- (e) For major desilting of the streamcourse, DSD will carry out the work.

In addition to the actions proposed, DSD and the Geotechnical Engineering Office (GEO) of the Civil Engineering Department (CED) agreed to the delegation's request to carry out an assessment and report on the slopes and drainage in the immediate vicinity of Mei Chung Court to reassure residents on safety.

11. The Department had reviewed the existing drainage system within the Court and found it to be in order in accordance with the current design standard accepted by DSD. The drainage system of the Court has been functioning properly in subsequent cases of heavy rainfall. There is no report on flooding nor damages within the Court during and after Typhoon signal no. 9 was hoisted on 2 August 1997.

CLAIMS FOR DAMAGES

12. The Department had met the residents' working group on 2 August 1997 to discuss several issues, particularly the following insurance aspects -

- (a) The insurance policy concerning Mei Chung Court.
- (b) Whether the owners of the Court need to bear the cost of reinstatement works within the Court.
- (c) Whether the Authority will compensate the damage to cars due to the flooding on 2 July 1997.

13. At the meeting, the Department confirmed that three insurance policies had been arranged for the HOS Court as follows -

- (a) **Public Liability Policy** purchased by Hong Yip (PMA) in the joint names with the Authority for the management of all common areas in Mei Chung Court (including the carpark). The insurance only covers damages and claims when the insured is legally responsible.
- (b) **Public Liability Policy** purchased by the Authority for carpark to cover its legal liability to third parties for accidental bodily injury or property damage in connection with all the Authority's business operations and associated activities.
- (c) **Collective Fire Policy** arranged by the Authority for owners and the Authority to cover all domestic blocks and common areas (excluding carpark) against loss or damage caused by fire & lightning, typhoon, windstorm and flood etc. The compensation is 100% except when the loss or damage is classified to be caused by landslip & subsidence, then the compensation will be up to 90% of loss only. The Department is negotiating with the insurance company about 100% coverage since the accident was caused by flooding.

14. The incident causing damages to the Court and vehicles has been referred to the insurance company and loss adjuster for investigation. There is no evidence demonstrating any negligence on the part of the Authority, and hence, the Authority will not be liable for compensation whatever due to such natural disaster occurred on 2 July 1997. As the insurance of Collective Fire Policy is arranged for owners and the Authority, the reinstatement cost for the slopes and common areas has been submitted to the insurer's loss adjuster who has been requested to indemnify owners and the Authority in terms and conditions of the policy.

15. The Department had met the resident's working group again at Mei Chung Court on 12 August 1997 to inform the owners of the details of reinstatement works to be implemented within the Court.

INFORMATION

16. This paper is issued for Member's information.

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