

**For information**

**Legislative Council  
Panel on Development and Panel on Home Affairs  
Joint Subcommittee to Monitor the Implementation of the  
West Kowloon Cultural District Project**

**Follow-up to meeting on 11 June 2018**

Following the meeting of the Joint Subcommittee to Monitor the Implementation of the West Kowloon Cultural District Project (Joint Subcommittee) on 11 June 2018, the Government provides supplementary information as requested below –

**1. Relocation of supporting operational facilities of Tsim Sha Tsui Fire Station Complex, Fire Services Club ("FS Club") and other Fire Services accommodations to To Wah Road, Kowloon**

- (a) the report of the risk assessment conducted by the Fire Services Department ("FSD") in respect of the planned storage of dangerous goods at the proposed new building at To Wah Road, and indicating in particular whether the assessment had taken into account the distance of the proposed new building from the nearby residential buildings (e.g. Sorrento) and the CLP Power Hong Kong Limited Centenary Substation;

The report on risk assessment conducted by FSD is attached at Annex.

- (b) in the funding proposal to be submitted to the Public Works Subcommittee, (i) a detailed breakdown of the estimated cost (i.e. about \$1,200 million in money-of-the-day prices) of the proposed works on the demolition, relocation and reprovisioning of relevant facilities covered under the project, and (ii) a floor plan of the proposed new building at To Wah Road; and

A detailed breakdown of the estimated project cost and floor plan will be provided in the funding proposal to be submitted to the Public Works Subcommittee.

- (c) **whether the Administration would consider expanding the area of the FS Club to be reprovisioned at the proposed new building at To Wah Road and keeping a barbecue area there, and/or identifying other site(s) for providing recreational club facilities of FSD.**

Same types and sizes of facilities of the existing FS Club will be reprovisioned at the To Wah Road site, including a barbecue area.

All FS Staff Unions/Associations have been consulted and they are satisfied with the reprovisioning proposal and wish to see early commissioning of the project.

**2. Proposed extension of supernumerary directorate posts in the Home Affairs Bureau ("HAB") and the Civil Engineering and Development Department ("CEDD") relating to the West Kowloon Cultural District ("WKCD") project**

- (a) **whether and how the concerned supernumerary directorate posts in HAB and/or CEDD would monitor the works of WKCD that were undertaken by the West Kowloon Cultural District Authority, including conducting on-site inspections to check the works quality and progress, etc.; and**

The WKCD project involves the planning and development of a 40-hectare waterfront site, with arts and cultural facilities, public open space, hotel/office/residential (HOR) developments, retail/dining/entertainment and infrastructure facilities. In view of the complex nature of this project, HAB in collaboration with other Government bureaux/departments have been working in close partnership with the West Kowloon Cultural District Authority (WKCDA) to provide timely advice and initiate actions when necessary to ensure that the objective of developing WKCD into a world-class integrated arts and cultural district will be achieved.

**Project Manager (HAB)**

Supported by a team of professional staff, Project Manager (HAB) has been working in conjunction with the management of WKCDA

in monitoring the expenditure and progress of the implementation of arts and cultural facilities in WKCD on design, construction and commissioning aspects and providing essential inputs and facilitation on these aspects to ensure the WKCD facilities are implemented in batches according to the WKCD Development Plan. In this process, Project Manager (HAB) facilitates effective liaison and co-ordination among WKCDA, Government bureaux/departments and share practices and experiences (including administration, tendering procedures, procurement strategies, etc.) in the construction industry with WKCDA for reference and benchmarking.

With regards to the essential public infrastructure works (PIW) and the integrated basement to support the phase development of WKCD, Project Manager (HAB), in close liaison with CEDD and WKCDA, also formulates the relevant development strategy and co-ordinates closely with other Government bureaux/departments to resolve any interfacing issues arising during the course of implementation.

Project Manager (HAB) discharges her duties through regular meetings with the management of WKCDA and attends as a representative of HAB at meetings of Executive Committee, Development Committee and Investment Committee of the WKCDA Board. Project Manager (HAB)'s inputs are crucial support to enable SHA to discharge his role as a WKCDA Board member.

#### Chief Engineer in the CEDD

Since the approval of FC for the creation of a supernumerary directorate post of Chief Engineer (CE) in the CEDD in July 2014, a dedicated team led by the subject CE has been set up in the CEDD. The dedicated team, comprising 12 professional and technical staff with multi-disciplinary expertise, undertakes the planning, design and construction of public works projects related to WKCD, viz. the integrated basement and PIW.

WKCDA and their appointed consultants and Resident Site Staff (RSS) are responsible for the routine construction supervision and quality control of the integrated basement and PIW. While the construction is entrusted to WKCDA to ensure interface with relevant facilities, the CEDD's dedicated team mainly monitors the

progress and works quality of the relevant projects through the following measures:

- (i) Establishment of meetings at various levels with WKCDA to monitor the WKCD project. Apart from the attendance of the management and project team of WKCDA, the consultants, RSS and contractors will also take part in individual meetings to report and discuss various project matters with the dedicated team including progress and works quality.
  - (ii) Conducting regular site inspection of the works progress and quality of different works categories by the dedicated team (comprising architects, engineers, building services engineers, geotechnical engineers, structural engineers, building surveyors and quantity surveyors) jointly with the WKCDA's project team and RSS.
  - (iii) Reviewing the monthly reports with details of the works progress, quality, site safety, etc. submitted by WKCDA and monitoring and auditing consultants. The dedicated team will take appropriate follow-up actions on the issues mentioned in the reports.
- (b) apart from taking forward the relevant works projects of WKCD, other work focuses of the concerned supernumerary directorate posts in HAB and CEDD in the coming years in relation to the implementation of the WKCD project, such as overseeing the progress and financial arrangements.**

#### Project Manager (HAB)

HAB exercises policy oversight on WKCDA. The Secretary for Home Affairs (SHA) is a member of the WKCDA Board. In support of HAB's responsibilities as a policy Bureau and as a Board member, Project Manager (HAB) will continue to oversee the overall progress of the WKCD project and play a leading role in co-ordinating views from Government bureaux/departments, WKCDA and other concerned parties on all matters affecting the

development of the WKCD project. There are a number of outstanding interfacing issues between the WKCD project and other projects under the integrated development approach, including integration of basement and underground road with WKCDA's facilities, and relocation of Government facilities such as the salt water pumping station, Tsim Sha Tsui Fire Station Complex and the fireboat pier within the WKCD site boundary. Project Manager (HAB) will continue to liaise with Government bureaux/departments and formulate workable action plans to tackle the interfacing issues.

Under the integrated development approach for the WKCD project, the majority of the topside HOR developments located in Zone 2 is highly integrated with the integrated basement and designated facilities of the underground road. As these HOR sites will be developed by WKCDA's private sector partners through the Build-Operate-Transfer (BOT) model under the Enhanced Financial Arrangement (EFA) for WKCD, Project Manager (HAB) will assume a co-ordinating role within the Government for providing inputs to WKCDA in formulating the development strategy, phasing and packaging of the BOT packages taking into account the phased implementation programme of the integrated basement and PIW projects covering planning, design, construction and commissioning as well as major and complex interfacing issues with these developments. Moreover, Project Manager (HAB) will monitor WKCDA's formulation of an appropriate external borrowing plan to finance the development of the remaining arts and cultural facilities.

#### Principal Assistant Secretary (WKCD)

Apart from the Project Manager (HAB)'s focus on works progress and financial management, PAS(WKCD) has been monitoring the progress of the implementation of the WKCD project on software and corporate governance, and providing essential inputs and facilitation on these aspects. In the near future, major arts and cultural facilities in WKCD, including Xiqu Centre, Freespace, M+ Museum, Hong Kong Palace Museum and Lyric Theatre Complex, will successively come on stream. PAS(WKCD) will work closely with the management of WKCDA to oversee the institutional set-up (including the management structure, mode of operation, manpower and policies) for performing arts venues and museums, WKCDA's

progress in planning of programmes and services for the opening of upcoming facilities in WKCD, WKCDA's development of cultural software, regular reviews by WKCDA in these areas of work, as well as planning of new facilities such as the Music Centre. In this process, PAS(WKCD) will continue to facilitate effective liaison and co-ordination among WKCDA, Government bureaux/departments, and share practices and experiences of relevant institutions with WKCDA for reference and benchmarking. PAS(WKCD)'s inputs are crucial support to enable SHA to discharge his role as a WKCDA Board member.

As a statutory organisation established under the West Kowloon Cultural District Authority Ordinance (WKCDAO), WKCDA is required to submit regular Corporate Plans/Business Plans and Annual Reports to SHA and the Financial Secretary respectively. As WKCDA's major arts and cultural as well as retail/dining/entertainment facilities become fully operational, WKCDA's business planning and reporting will grow in sophistication, and PAS(WKCD) will monitor WKCDA's discharge of its functions as required under the WKCDAO. Going forward, WKCDA is working intensively on the implementation of the EFA provided by the Government and developing the BOT arrangements for the HOR sites. PAS(WKCD) will continue to work hand in hand with Project Manager (HAB) in monitoring the establishment and implementation of corresponding institutional set-up for planning, formulation and management of relevant development arrangements. PAS(WKCD)'s inputs are crucial support to enable HAB to ensure compliance with the framework agreed with the Government.

#### Chief Engineer in the CEDD

To tie in with the phased development of WKCD, the subject CE will continue to lead the dedicated team and is responsible for the overall administration, planning, design and construction supervision of works packages of the integrated basement and government infrastructure works for WKCD in the next few years, which mainly include the ongoing construction of the integrated basement in Zones 3A and 3B, the first and second construction packages of the PIW as well as the planning and design of the integrated basement in Zone 2 and the remaining PIW. It is anticipated that the upcoming workload

of the dedicated team led by the subject CE would continue to keep at peak level in the next few years in handling the consultation, communication and co-ordination with interfacing parties, planning and conducting public consultation, completing the required statutory process, applying funding from LegCo in a timely manner to commence the remaining construction works as well as monitoring the project progress, cost control, works quality, etc.

**Home Affairs Bureau**

**Civil Engineering and Development Department**

**Fire Services Department**

**October 2018**

**Risk Assessment Report of DG Store Application****1. Location of Premises**

The address of DG stores under application is G/F, Tsim Sha Tsui Fire Station Complex, To Wah Road, Tsim Sha Tsui, Kowloon. It is situated in an institutional building which is used as Tsim Sha Tsui Fire Station Complex.

**2. Information of Owner and Developer**

The Fire Services Department is the ultimate user of the subject DG stores. Andrew Lee King Fun & Associates Architects Ltd. (ALKF+) is the agent responsible for handling the design and construction of the stores.

**3. General Description of the Building and Siting of the Proposed D.G. Store(s)**

The subject development is a 12-storey R.C.C. building with three-storey used as fire services workshop and 9-storey used as offices, departmental uniform store, facilities for physical training establishment office, ancillary facilities and the FS club. The 8 nos. of D.G. stores are proposed to be located on G/F, southeast portion of the subject building (**please see Appendix I**). The surroundings of the proposed site have been inspected and summarized as follows (**please see Appendix II**) :-

- i) At the North of abutting the proposed site is an open ground of about 50m x 50m used as temporary site for storage of construction materials. In addition, FSD West Kowloon Rescue Training Centre and the Civil Aid Service Headquarters are located at about 35m and 70m respectively away from the proposed site;
- ii) At the East is the temporary site for the KMB Jordan (To Wah Road) Bus Terminus of about 60m x 70m;
- iii) At the South is the CLP Centenary Substation about 15m away from the proposed site. Moreover, a numbers of residential buildings are located at



about 100m away from the proposed site; and

iv) At the West is Nga Cheung Road and West Kowloon Highway.

#### **4. Risk Assessment**

##### ***4.1 Identification of Hazards***

The proposed 8 nos. of D.G. stores is comprised of 2 x Category 2 D.G. stores, 2 x Category 5 D.G. stores, 3 x Multiple Category D.G. stores and 1 x D.G. Sample Store. The usable floor areas of D.G. stores range from 8.3m<sup>2</sup> to 88.2m<sup>2</sup>. The D.G. stores are proposed to be built for the temporary storage of D.G. samples and D.G. seized during enforcement actions and subsequent arrangements will be made to further dispose the D.G. after court proceedings. D.G.(s) commonly seized in enforcement are listed below:-

- (i) Category 2 D.G. : oxygen, acetylene, helium, carbon dioxide, nitrogen, freon, hydrogen;
- (ii) Category 3 D.G. : sodium hydroxide;
- (iii) Category 4 D.G. : sodium hypochlorite solution; and
- (iv) Category 5 D.G. : paint, diesel, petrol

##### ***4.2 Possible Hazards Associated with the proposed DG storage***

The possible hazards associated with the proposed DG storage include fire, explosion, spillage of toxic substance and spillage of corrosive substance.

##### ***4.3 Identification of Parties at Risk***

The parties that are likely at risk include occupants of the subject F.S. building and the general public of the surrounding premises.

#### **5. Evaluation of Hazard(s) or Risk(s) and mitigation measures**

### ***5.1 On-site hazard(s) or risk(s) – fire or explosion***

With due consideration given to the nature of proposed D.G. storage which might constitute fire/explosion risks, the following standard fire safety recommendations including the fire resisting construction and the provision of fire service installations compatible to the type of D.G. should be provided to mitigate any possible risks.:-

- (i) At least 2 hours FRR on its ceilings and walls should be provided at the proposed D.G. stores;
- (ii) An approved type of fixed fire extinguishing system should be provided in accordance with the size of the proposed D.G. stores;
- (iii) Any electrical device/appliance if so provided inside the proposed stores for storage of combustible D.G. should be of explosion-proof type and further compliance inspection by inspector of Ventilation Division of FSD is necessary; and
- (iv) High and low level ventilators equipped with fire dampers with at least 2 hours FRR should be provided in the proposed D.G. stores.

### ***5.2 On-site hazard(s) or risk(s) – toxic or corrosive and mitigation measures***

The D.G. stored inside the subject stores might be toxic and corrosive in nature. Physical contact with those D.G. might pose health hazard to human. In this connection, sufficient mitigation measures, appropriate fire service installation & equipment and passive fire protection building elements should be provided to minimize the hazard and risk likely posing to the surroundings including the follows:-

- (i) The proposed D.G. stores should have adequate retaining capacity to contain any possible spillage of D.G.; and
- (ii) The ventilators so provided to improve the natural ventilation should be positioned above the highest point of the door curb to

prevent any possible spillage of D.G. therein.

### ***5.3 Other Considerations and Fire Safety Recommendations***

In view of the foregoing, measure(s) to mitigate the possible hazard(s) or risk(s) that might likely bring to the vicinity are incorporated into the Fire Safety Recommendations when processing the subject DG application. The measure(s) include:-

- (i) As an important part of fire resisting construction, all doors of the proposed D.G. stores should have construction of not less than 1-hour FRR and self-closing device to be fitted with swing direction outwards;
- (ii) Adequate natural ventilation with ventilators of appropriate size or an approved mechanical ventilation system should be provided in all proposed stores;
- (iii) Based on the submitted design, the siting of the proposed D.G. stores should not jeopardize the Means of Escape (MoE) / Emergency Vehicle Access (EVA) of the building; and
- (iv) No D.G. stores would be located immediately above or below the proposed D.G. stores.

### ***5.4 Off-site Hazard(s) or Risk(s)***

#### **5.4.1 China Light and Power Centenary Substation**

Electricity is transmitted and distributed by different types of electric substations. The CLP Power network includes extra high voltage (EHV) substations, bulk infeed substations (BISs), primary substations (zone substations) and consumer substations. The CLP Centenary Substation in the subject case is categorized as primary substation (to receive electric power at voltage of 33kV up to 132kV) which distributes electricity to the nearby residential areas, e.g. Sorrento, via underground power cables. All facilities, e.g. transformers inside the substation, are designed and

installed according to CLP Code of Practice. No overhead transmission lines are noted.

According to Chapter 7 (Utility Services) of the Hong Kong Planning Standards and Guidelines, for EHV substation receiving electric power at voltage of 400kV from power station, the separation distance from other buildings/structures should be at least 6m. The “Design, Construction, Modification, Maintenance and Decommissioning of Filling Stations” (2<sup>nd</sup> edition) published by APEA and Energy Institute stipulates that the separation distance between a petrol filling station and a domestic premises housing vulnerable population is 12m. Therefore, the measured distance between the CLP Centenary Substation and proposed D.G. stores of about 15m is considered acceptable.

Furthermore, according to the submitted drawings, a 2.5m high fence wall as separation would be built along the site boundary of the new fire station complex enclosing all F.S. premises including the proposed D.G. stores and thus separating the stores from the CLP Centenary Substation. Considering that the effects of fire or explosion upon the adjacent CLP primary substation would be minimized and the jeopardizing of means of escape of persons at the substation or at the DG Stores would be avoided by the setting up of separation wall, the risk level is therefore considered acceptable.

#### **5.4.2 Temporary KMB Jordan (To Wah Road) Bus Terminus**

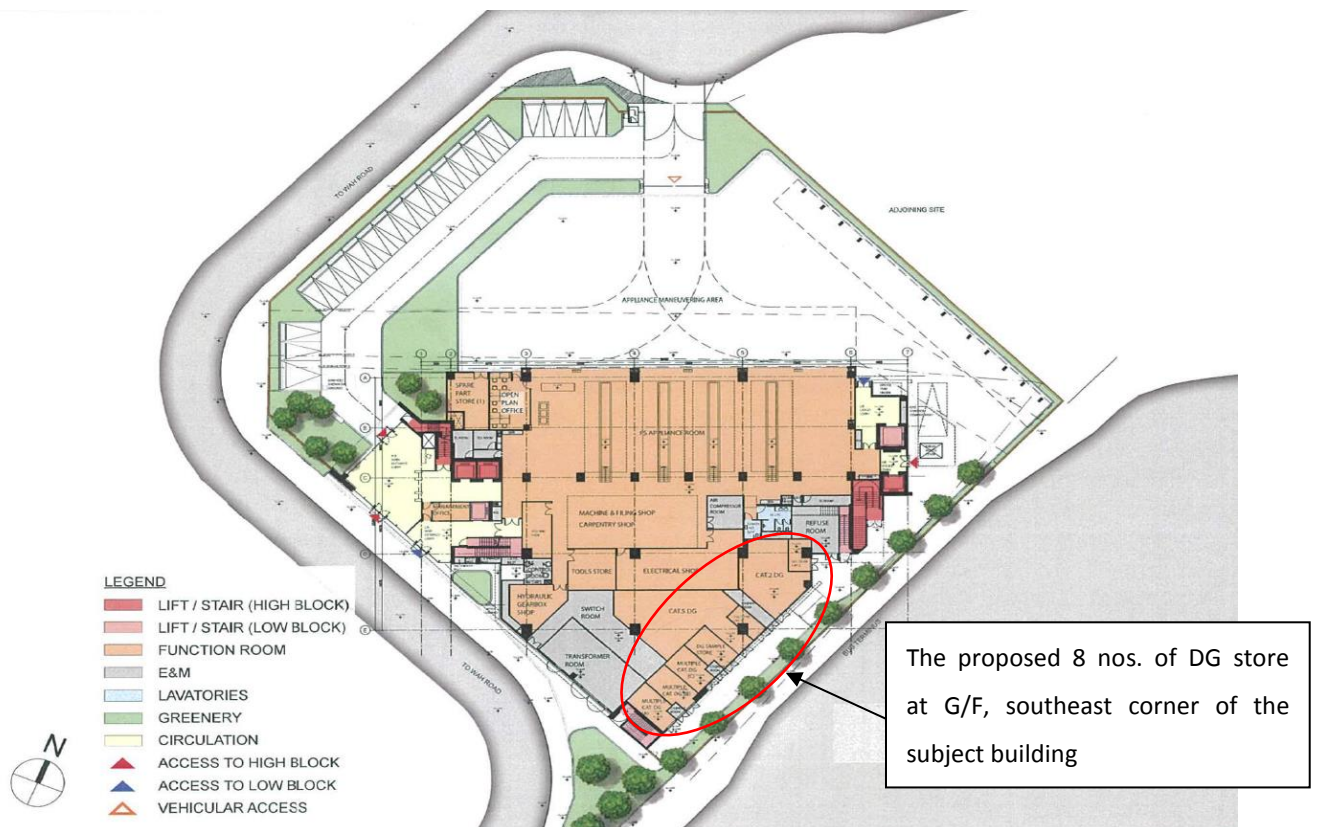
This bus terminus was relocated from Jordan (Wui Cheung Road) Bus Terminus in 2009 due to the construction of Guangzhou-Shenzhen-Hong Kong Express Rail Link (XRL). After the completion of XRL construction project, this bus terminus will be relocated and the land is planned to be used as a temporary car park. According to the submitted drawings, a 2.5m high fence wall as separation would be built along the site boundary of the new fire station complex enclosing all F.S. premises including the proposed D.G. stores and thus separating the stores from this temporary bus terminus. Also, the proposed D.G. stores would be constructed according to the existing Fire Services Recommendations and all the D.G. would be

stored inside the approved D.G. stores. In view of the above, the risk level is considered acceptable.

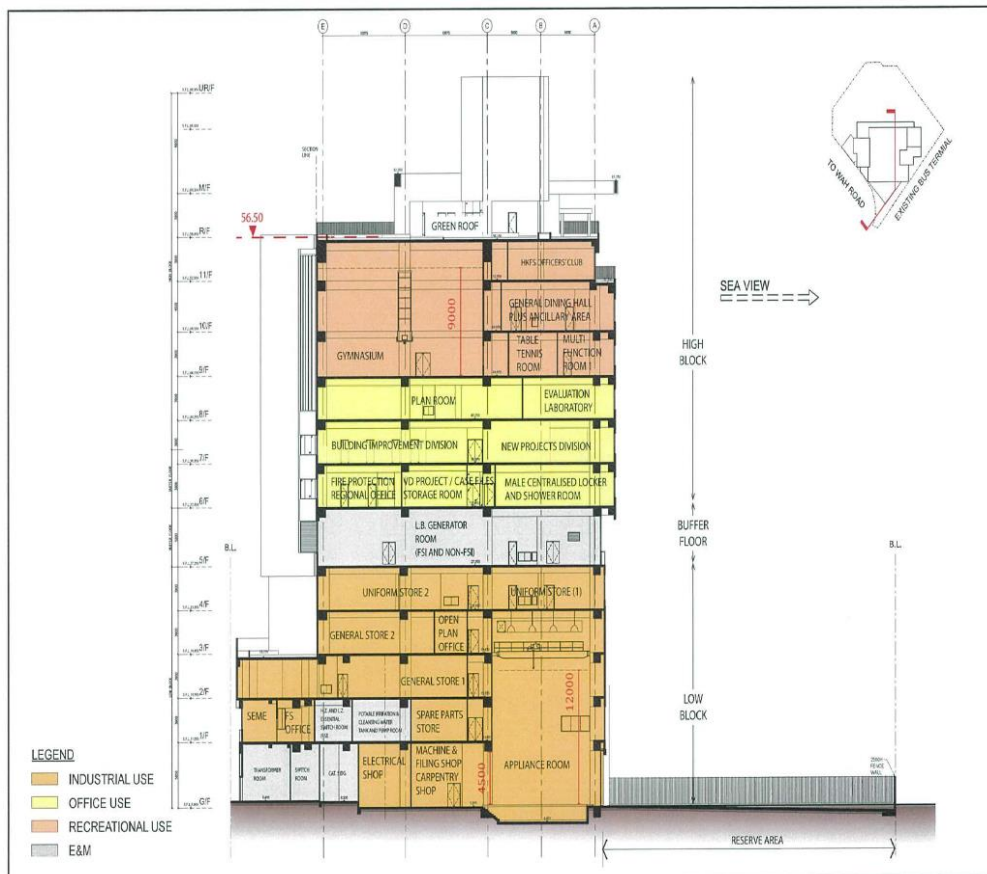
#### **5.4.3 Nearby Residential Areas**

In this risk assessment, it is noted that the location of the proposed D.G. stores is about 100m away from the nearby residential areas. With reference to the separation distance of 12m between the petrol filling station and domestic premises as recommended in “Design, Construction, Modification, Maintenance and Decommissioning of Filling Stations” (2<sup>nd</sup> edition) published by APEA and Energy Institute as a safety standard in this evaluation, the proposed location is considered acceptable. Despite of that, the proposed stores should be of 2-hour FRR construction with the provision of fire service installations appropriate to the nature of D.G. storage for mitigation of any possible risk.

### Layout Plan of the Proposed Site



Elevation Plan of a 12-storey R.C.C. building of about 40m x 40m used as Fire Station Complex





## Location Map



## Inspection Photos

From angle A 



From angle A 📍



From angle B 📍





From angle C 📍



From angle D 📍

