



本局檔號 Our Ref.: THB(T)CR 20/1016/99

來函檔號 Your Ref.: CB1/F/2/6(III)

Tel No : 2189 2187
Fax No : 2868 5261

By FAX (2869 6794)

14 February 2011

Ms Debbie Yau
Clerk to Public Works Subcommittee
Legislative Council Secretariat
3/F Citibank Tower
Hong Kong

Dear Ms Yau,

**Public Works Subcommittee
Follow-up to meeting on 19 January 2011**

Kwun Tong Line Extension – Essential Public Infrastructure Works

I am writing to provide supplementary information in response to the questions raised by Members about the Kwun Tong Line Extension (KTE) – Essential Public Infrastructure Works during the meeting of the Public Works Subcommittee on 19 January 2011.

a) **The subway link between the proposed Ho Man Tin Station (HOM) and the Ho Man Tin Estate**

2. The Ho Man Tin Estate is situated on raised terrain and is about 350 m away from the proposed HOM, with the Ho Man Tin East Service Reservoir lying in between. Taking account of the said geographical factors, and the risk of constructing a subway underneath the service reservoirs, we have proposed in the

gazetted original scheme of KTE the provision of a pedestrian link system comprising covered footbridges, covered walkways and a subway to connect the Ho Man Tin Estate to HOM. The system will not only provide a comfortable and safe walking environment but also improve effectively the overall pedestrian walkway network in the district. After the gazettal of the original scheme and in response to local residents' views, we have provided in the amended scheme an additional subway leading from Fat Kwong Street near the Ho Man Tin East Service Reservoir Playground to HOM. Passengers from the Ho Man Tin Estate can use either this proposed subway or the pedestrian link system proposed in the original scheme to access the station.

3. Regarding the said additional subway at Fat Kwong Street, the MTR Corporation Limited (MTRCL) has studied the possibility of extending it to a location closer to the Ho Man Tin Estate. Given the narrowness of the existing footpath at Fat Kwong Street, if the proposed subway is extended, the structure of its entrances and lifts will affect the slope adjoining the footpath at the Ho Man Tin East Service Reservoir. This will not only put the construction works at huge risk but also greatly lengthen the construction time. We therefore consider that the subway should not be extended.

b) A pedestrian link system to connect the proposed Whampoa Station (WHA) to the Laguna Verde, Harbour Place and residential developments nearby

4. To facilitate access to the new railway stations, the Government will be responsible for the construction cost of the pedestrian link facilities under the KTE project. In providing these pedestrian link facilities, prudent consideration will be given to a number of objective factors, such as conditions of existing pedestrian network and facilities, topographic conditions, road safety concerns, road traffic situation, technical viability, pedestrian utilisation and cost-effectiveness.

5. The proposed WHA is located at level ground with good at-grade pedestrian network and ancillary facilities. The proposed entrances to the station are conveniently located to provide railway services for the residents in the neighbourhood. The existing footpath along Hung Hom Road can directly connect the Hok Yuen area, the neighbouring residential, industrial and commercial areas, i.e. the Laguna Verde and its nearby areas, to WHA. This levelled footpath is approximately 400 m long and about 3 m wide, and can adequately cope with

the growth in pedestrian flow in future. Moreover, with roadside planting, the footpath can provide an overall comfortable environment for pedestrians. In view of the above, we believe it is not necessary to provide additional pedestrian link facilities in that road section.

6. As for Hung Hom Bay, i.e. the Harbour Place and its nearby areas, there are suitable pedestrian facilities to connect to WHA. Residents of the Harbour Place may use the covered footbridge with barrier-free access across Hung Hom South Road to reach the footpath along Hung Hom Road to gain access to the entrance of WHA located near Ka Fu Building. On the other hand, residents of the Royal Peninsula and University Student Halls of Residence may use the existing pedestrian link to access Hung Hom Station in addition to taking the above route to WHA.

c) Greening measures for the pedestrian link systems of the KTE

7. The existing footpath along Hung Hom Road connecting WHA to the Hok Yuen Area and the neighbouring residential developments in Hung Hom is already planted with a row of trees. To further enhance pedestrian facilities, more trees will be planted along the footpath to strengthen the shading effect and also improve the landscape and overall environment. As to the pedestrian link facilities of HOM, planters and vertical greenings will be installed to provide a green environment.

8. In conjunction with the MTRCL, we will continue to closely liaise and exchange views with the locals on these enhancement facilities. In addition, the MTRCL will set up Community Liaison Groups during the construction period, so as to meet with local stakeholders regularly to listen to their views on the construction works.

d) Plan to display artworks on footbridges and in stations constructed under the KTE project

9. With its “art in mtr” initiative, the MTRCL makes art part of MTR stations to allow passengers easy access to various art elements and to enhance their MTR journeys. Through art programmes such as “open art gallery”, “arttube”, “roving art” and “community art galleries” rolled out at MTR stations, local famous artists, aspiring artists, designers and talented individuals in the

creative industries are invited to showcase in MTR stations their two-dimensional and three-dimensional art creations. The initiative has been well-received by both passengers and arts organisations. These programmes involved community participation and have succeeded in enhancing the connection between the communities and their MTR stations. By incorporating local culture and characteristics into the stations, the programmes have also helped promote Hong Kong's community art and given residents a feeling of home at MTR stations.

10. In addition, 38 art pieces of higher artistic merits created by artists from not only Hong Kong, Mainland and Taiwan but also Korea, Australia, New Zealand and USA have been put up at different MTR stations. Varied in genre and style, these art pieces have become part of the station design and architecture.

11. The MTRCL will continue to pursue its "art in mtr" initiative at the HOM and WHA of the KTE. Through community participation, local characteristics, history and culture will be incorporated into the design of the stations. The MTRCL is making preparation for the relevant art projects and in discussion with local arts groups to identify suitable artworks, which are in line with the characteristics of the district and can also promote local art. Furthermore, the MTRCL is studying the locations for the artworks in the stations to facilitate appreciation of the artworks without affecting passenger flow.

12. In incorporating art elements into the footbridge connecting the Ho Man Tin Estate, Oi Man Estate and neighbouring housing estates to HOM, we face more constraints in the selection of artwork and consideration of locations. In addition to taking account of the aesthetic and diversity of the artworks, compatibility with local characteristics and suitability for display outdoor exposed to the elements, it is necessary to consider the impact on passenger flow and loading of the facility, whether there is sufficient space for pedestrians to appreciate the artworks and the impact on daily operation and pedestrian safety, etc. Artworks would be displayed on the premise that they would not hinder the public from using the pedestrian link system. In conjunction with the government departments concerned, the District Council and local community, the Highways Department and the MTRCL will explore the viability of putting up art pieces reflecting the characteristics of the district.

13. The artistic merits of art works displayed in MTR stations and public space are influenced by various factors, such as the artist concerned, genre (e.g.

sculptures, prints, large three-dimensional installations, etc.) and copyright, and thus it is not possible to make sweeping generalisations. The MTRCL and relevant government departments will decide on the appropriate artworks for display, taking into account the specific circumstances of each station or pedestrian access.

14. I should be grateful if you would relay the above information to the members of the Finance Committee.

Yours sincerely,



(C W Chow)

for Secretary for Transport and Housing

c.c. Secretary for Financial Services and the Treasury
(Attention: Ms Joyce Ho, fax no. 2147 5240)
Chief Engineer/Railway Development Office, Highways Department
(Attention: Mr. K S Yeung, fax no. 2194 0147)
Project Manager (SCL/KTE Civil) MTR Corporation Limited
(Attention: Mr James Chow, fax no. 2163 6162)
Public Relations Manager - Projects & Property, MTR Corporation
Limited (Attention: Ms Prudence Chan, fax no. 2795 9991)

政府總部
運輸及房屋局
運輸科
香港花園道美利大廈



Transport and
Housing Bureau
Government Secretariat
Transport Branch
Murray Building, Garden Road,
Hong Kong

本局檔號 Our Ref. THB(T) CR 17/1016/99
來函檔號 Your Ref. CB1/F/2/6(III)

電話號碼 : 2189 2187
傳真號碼 : 2868 5261

(Fax: 2869 6794)

Secretary to the Public Works Subcommittee
LegCo Secretariat of Finance Committee
3/F Citicorp Tower
3 Garden Road
Hong Kong

(Attn.: Ms. Debbie Yau)

14 February 2011

Dear Madam,

**Finance Committee
Public Works Subcommittee
Meeting on 25 January 2011**

**South Island Line (East)
Essential Public Infrastructure Works**

The Administration would like to provide supplementary information regarding the questions raised in the Legislative Council (LegCo) Public Works Subcommittee meeting on 25 January 2011 on “South Island Line (East) – essential public infrastructure works”.

(a) **The mitigation measures to be adopted by the MTR Corporation Limited (MTRCL) at the construction stage of the South Island Line (East) (SIL(E)) project to further reduce the noise generated by the works**

2. The SIL(E) project is a “designated project” under the Environmental Impact Assessment (EIA) Ordinance and has to go through the EIA Process. Under the Ordinance, the MTRCL shall prepare and submit to the Director of Environmental Protection an EIA report for the SIL(E) in accordance with the requirements of the EIA study brief and the relevant technical memorandum. The EIA report has been approved by the Environmental Protection Department (EPD) and an environmental permit was issued in late 2010.

3. The scope of the SIL(E) project comprises the construction of tunnels, viaducts, stations, depot and relevant essential public infrastructure works. The MTRCL has considered the implementation of different measures to mitigate noise impact as far as practicable at the design stage, and will also stipulate the compliance with EIA requirements in respect of the works to be carried out under different contracts of the project.

4. In the course of construction, the MTRCL will ensure that the works are carried out in accordance with the requirements of the EIA Ordinance and other legislation. The contractors will be required under the works contracts to include suitable measures in the method of construction to alleviate noise at source, including using quieter powered mechanical equipment, temporary or movable noise barriers, silencers and noise insulating materials, and effective arrangement of work process to minimise noise levels during construction. The MTRCL will adopt a series of mitigation measures to keep noise to a minimum. For instance, the construction works will be carried out in phases as far as possible and good practices will be adopted at the construction sites to minimise noise impact.

5. The MTRCL will conduct environmental monitoring and audit to ensure that the proposed mitigation measures are effective and meet the requirements of relevant legislation. The Corporation will also submit monthly reports on the results of monitoring and audit to the EPD and make available the results to the public through the websites of the EPD (the EIA Ordinance) and the MTRCL.

(b) The proposed temporary magazine at Chung Hom Shan for the SIL(E) project and the control measures to be adopted by the MTRCL for the safe transport, storage and use of explosives

6. The MTRCL has proposed a remote site in Chung Hom Shan for setting up a temporary magazine for storing a small amount of explosives for tunnel construction and the site formation works under the SIL(E). The site is situated far away from residential areas. It is accessible by roads and relatively near the project construction sites at Nam Fung Road and Ap Lei Chau.

7. The proposed site at Chung Hom Shan is about 250 m from Chung Hom Kok Road and more than 300 m from the nearest residential area. There is a slope of about 60 m high separating the proposed site and the residential area. The MTRCL will provide two separate rooms, each with individual entrance/exit, for storage of explosives and detonators so as to reduce the chance of accidents. Moreover, the MTRCL will construct an earth bund of up to 2.7 m high, with a base of up to 3 m thick in the vicinity of the store. Inside and around the store, fire fighting and security installations will be provided. Moreover, security guards will be deployed around-the-clock.

8. The MTRCL has completed a quantitative risk assessment for the proposed temporary magazine at Chung Hom Shan as well as the storage and transport of explosives. The assessment was conducted on the basis that 'risk

should be mitigated to as low as reasonably practicable” as stipulated in Annex 4 of the Technical Memorandum on EIA Process and in accordance with the requirements set out in the EIA study brief issued by the EPD for the SIL(E), namely to identify and assess feasible and cost-effective mitigation measures, including to consider “the shortest feasible route” from the temporary magazine to the construction sites.

9. The MTRCL will strictly enforce risk control and safety measures according to the standards provided in the Dangerous Goods Ordinance to ensure that the explosives will be stored, transported and used in a safe manner during construction. Vehicles delivering the explosives and their drivers have to be approved by the Commissioner of Mines. The vehicles must have storage space separating the detonators from the cartridged explosives, and have fire fighting equipment. As the explosives will not explode without a detonator, this arrangement can reduce the chance of accidents. The drivers are required to undergo training on fire fighting and the handling of explosives, and deliver the explosives according to safe driving procedures. Moreover, the contractors have to obtain a removal permit from the Commissioner of Mines for the transport of the explosives. The construction works in Hong Kong has a long history of using explosives. According to record, no accident involving the transport of explosives has ever occurred over the years, which proves that the storage, transport and use of explosives has always been undertaken in a safe manner.

10. The MTRCL will strive to monitor its contractors to keep the risk of storage, transport and use of explosives to a minimum.

Yours faithfully,



(C W Chow)

for Secretary for Transport and Housing

| | | | |
|------|----------------------|-----------------------------|-----------|
| c.c. | SFST | (Attn.: Ms. Joyce HO) | 2147 5240 |
| . | Director of Highways | (Attn.: Mr. Henry C Y CHAN) | 2714 5297 |
| | MTR Corporation Ltd | (Attn.: Mr. SIU Kam-hang) | 2798 8822 |

政府總部
運輸及房屋局
運輸科
香港花園道美利大廈



Transport and
Housing Bureau
Government Secretariat
Transport Branch
Murray Building, Garden Road,
Hong Kong

本局檔號 Our Ref. THB(T) CR 17/1016/99
來函檔號 Your Ref.

電話號碼 : 2189 7496
傳真號碼 : 2868 5261

BY FAX (2537 4874)

14 February 2011

Hon. KAM Nai-wai
Secretariat of Legislative Councilors of The Democratic Party
Room 409, West Wing
Central Government Offices,
11 Ice House Street, Central,
Hong Kong

Dear Sir,

Shatin to Central Link and South Island Line (East) Projects

Thank you for your letter dated 24 January 2011 conveying the concerns of the Democratic Party's Southern District Councilors over the Shatin to Central Link (SCL) and South Island Line (East) (SIL(E)) projects. Our responses to their questions and views are detailed below.

1. Shatin to Central Link

A. Platform Reserved for SCL at Admiralty Station

The Admiralty Station will be the terminus on Hong Kong Island for both the proposed SCL and SIL(E). The Government and the MTR Corporation Limited (MTRCL) plan to expand the existing Admiralty Station to accommodate railway facilities for the SCL and SIL(E), so as to provide convenient and efficient platforms for SCL and SIL(E) passengers to

interchange to the existing Tsuen Wan Line and Island Line.

The expanded Admiralty Station will comprise six levels. The lowest level will be the SIL(E) platform, with the SCL platform immediately above it. The other levels will be interchanging platforms and station entrances. From a technical perspective, the expanded Admiralty Station must be constructed one layer on top of the other. Without the completion of the structural works for the SCL platform, the construction works for the upper levels cannot be carried out for the effective operation of the railway. Therefore, the SCL portion at the Admiralty Station and the construction of the SIL(E) must be carried out in tandem for the commissioning of the SIL(E) in 2015 as scheduled. To tie in with the implementation programme of the SIL(E), the fundamental structural works of the whole integrated Admiralty Station has to be completed before the commissioning of the SIL(E).

The Government will entrust the advance works for the SCL portion at the integrated Admiralty Station to the MTRCL for implementation in conjunction with the SIL(E) project. Most of the civil construction works for the integrated station will be completed in tandem with the SIL(E) project. Other dedicated facilities (such as electricity and air-conditioning systems) and finishing works solely for the SCL in the integrated station will be installed or carried out after the funding for the SCL scheme has been approved by the Finance Committee (FC) of the Legislative Council (LegCo). These works are thus not included in the funding application for the advance works for the SCL.

In the construction of railways, it is a common arrangement to carry out civil construction works in advance for a portion of another railway line. Both the platform reserved at the Hong Kong Station for future use by the Airport Express and the platform to be built at the Exhibition Station for use by the future North Island Line (NIL) are the same type of arrangement. The platform reserved at the Hong Kong Station only has its civil construction works completed and has yet to be provided with passenger facilities. Similarly, the platform to be built at the Exhibition Station of the SCL for future use by the NIL will only have its civil structures completed, with the installation of railway facilities and interior finishing works to be carried out under the NIL project.

B. Apportionment of Funding for the Admiralty Station

As mentioned above, the current funding application to the FC of the LegCo for the advance works for the SCL portion at the Admiralty Station is made on the grounds that from the technical perspective, the civil construction works involved cannot be conducted separately. Moreover, the advance works for the SCL portion and the works for the SIL(E) portion at the Admiralty Station must be completed in tandem. Apportionment of funding for the Admiralty Station is not a consideration for carrying out the advance works for the SCL portion.

C. Shek O Quarry as Casting Yard for Immersed Tube Tunnel

The cross-harbour tunnel of the SCL will be built using immersed tubes. Shek O Quarry has been identified as the only suitable venue for SCL immersed tube tunnel casting yard. The Government and the MTRCL consulted the Southern District Council (SDC) on the proposed usage of the quarry in November 2009 and July 2010 providing detailed information to explain the reasons for the decision. The District Council did not object to the temporary use of the quarry for infrastructure purposes from 2013 to 2018 and in the process of consultation, Members were aware that the use of Shek O Quarry had not been specified on the statutory plans. The Government will review the long-term use and planning timetable of the site.

The setting up of a casting yard for the immersed tube tunnel at Shek O Quarry will not only increase job opportunities for local construction workers, alleviating unemployment, but also sustain development of the technique, having a positive long-term impact on Hong Kong as a whole.

2. South Island Line (East)

A. Design of the Public Transport Interchange

The public transport interchange (PTI) to be built underneath the Wong Chuk Hang (WCH) Station will provide buses, green minibuses, taxis and other vehicles with loading/unloading facilities, so as to facilitate optimum inter-modal co-ordination between the railway and other modes of public transport for residents from the neighbouring areas to interchange to the SIL(E). In proposing the essential facilities, the Administration has fully taken into account the projected patronage upon commissioning of the railway and arising

from developments in the District.

As for the design of the PTI, there will be escalators connecting to the WCH Station to facilitate passengers interchanging to the railway. The PTI will adopt a semi-enclosed design to maintain air ventilation, with shelters for passengers at waiting areas of the bus stops. Regarding the layout of the bus bays and platforms at the PTI, we have to take into consideration various factors at the planning stage, such as the location, area, purpose and surrounding environment of the PTI. The PTI at the WCH Station will mainly provide loading/unloading facilities for buses routes via the PTI, therefore, bus stops will be provided single-line along the two-lane carriage to enable the buses to enter and leave the PTI directly. To cater for the design of the PTI, the waiting areas can be located close to the escalators connecting to the WCH Station to facilitate passengers interchanging to the railway. In view of the overall topographic conditions and layout, the proposed arrangements for the PTI at the WCH Station are more desirable than adopting a terminus-style design with serrated bus bays.

The travel pattern of the public would be changed by the commissioning a new railway. To tie in with the commissioning of the SIL(E), the Administration will made suitable adjustment to public transport services to effectively cope with the changes in passenger demand. At present, we have not drawn up the routes using the PTI or its scope of service. As in the case of previous new railway projects, we will examine, prior to the commissioning of the SIL(E), the overall impact on other road-based transport modes, in the light of the current public transport services. A new plan for public transport services will be mapped out and the District Council and the public transport trades affected will be consulted in due course.

B. Section between WCH Station and Lei Tung Station

The essential public infrastructure works (EPIW) for the SIL(E) will include the modification of a section of the existing WCH nullah, which is about 650 m in length between Ocean Park Road and Nam Long Shan Road, into a decked structure. The decked structure will provide space for improvement to the road network around Heung Yip Road and construction of the proposed PTI.

We understand that the Drainage Services Department (DSD) has also planned to deck over and improve the WCH nullah. The Highways

Department (HyD) and MTRCL have thus been in close liaison with the DSD since the beginning of the preliminary design stage of the SIL(E). The proposed scope of works covers the whole section of the nullah between Ocean Park Road and the Aberdeen Channel waterfront. The existing nullah will be retained and improved while the required transport facilities can be constructed over the decked structure. To avoid overlapping of works, the DSD has no further plan to improve the nullah at this stage.

The pedestrian link and related facilities connecting the WCH Station to the Aberdeen Channel waterfront will be managed by the relevant government departments, including the Transport Department, HyD, Leisure and Cultural Services Department, etc. Management of the facilities has been clearly divided among the departments according to their respective ambit and the functions of the facilities concerned. The pedestrian link, which is about 2.5 m in width, complies with the standards laid down in the Transport Planning and Design Manual. The environment in the vicinity of the facilities and the estimated pedestrian flow upon commissioning of the new railway have been fully taken into account. The provision of cycle tracks for transportation purposes is currently not included in our overall planning for the urban areas, but the views of Members have been noted. Regarding the road widening works at Police School Road and Nam Long Shan Road, they are designed having regard to the traffic flow after the completion of the WCH Station.

Your letter raised an enquiry about why the proposed EPIW will not include a footbridge linking the proposed WCH Station and Sham Wan area. The MTRCL has carefully considered the proposal in the past and is of the view that there are now adequate and safe at-grade pedestrian crossings at the road junction of Nam Long Shan Road and Sham Wan Road. The capacity of these facilities are able to meet the pedestrians' need even when SIL(E) comes into operation. On the other hand, due to site constraint, any provision of footbridge columns will have to occupy and narrow the pedestrian access near the San Wui Commercial Society Chan Pak Sha School. If the pedestrian access is widened to accommodate the footbridge abutments, the carriageway of Nam Long Shan Road will have to be narrowed. This will cause traffic congestion to the road junction of Nam Long Shan Road and Sham Wan Road.

The MTRCL will provide, at its own cost, a covered walkway within the future topside property development of ex-WCH Estate site to connect the WCH Station to the existing WCH bus terminus. This will provide convenient access to the future station for use by the residents at Sham Wan

area. The design of the covered walkway and its arrangement will be carried out in conjunction with the property development of the ex-WCH Estate site. Before the completion of the property development, the MTRCL will also provide a temporary covered walkway along Nam Long Shan Road connecting to the WCH Station, so that residents in Sham Wan area can access the WCH Station via Nam Long Shan Road more conveniently. The MTRCL is now conducting the planning and design for the property development and will fully consider the local residents' views and suggestions.

To facilitate public access to the WCH station, a footbridge will be constructed near the existing PTI at WCH Road and Nam Long Shan Road to link up WCH Road and Heung Yip Road. Residents in the vicinity of Welfare Road and Sham Wan may use the staircase and lift adjacent to the Cooked Food Market to access the WCH station.

To enable the construction of the viaduct section of the SIL(E), the MTRCL will conduct stabilization works for the slope adjacent to the Tung Wah Group of Hospitals Jockey Club Rehabilitation Complex near the WCH nullah. In the future, the MTRCL will be responsible for the maintenance and management of this section of slope, which is related to the railway project. As to the pedestrian link connecting the WCH Station to the Aberdeen Channel waterfront, it will not be involved in the maintenance or improvement works for the slope adjacent to the nullah.

C. Lei Tung Station

In collaboration with the SDC, the MTRCL conducted two rounds of consultation in 2008 on the SIL(E) scheme in the Southern District. There were different proposals on the location of the entrances to the Lei Tung Station and the response of most of the residents was that the entrance in Lei Tung area should be outside the Lei Tung Commercial Centre. In planning for the location of stations and entrances of the SIL(E), the MTRCL has to consider and balance a number of factors, which mainly include the catchment, method of construction, technical viability and the impact on the residents in the vicinity during construction. The two entrances to the Lei Tung Station will cater for other transport modes and adequately serve the main population group in the area.

One of the entrances to the Lei Tung Station will be located at the existing bus terminus off the Lei Tung Commercial Centre. Therefore, some

of the bus stops have to be relocated. Under the current scheme, a portion of land at some of the planters below the slope opposite Tung Hing House of Lei Tung Estate will be resumed to re-provision the affected bus stops. The relocation and re-provisioning works for the bus stops will be included in the reconstruction and improvement works of the MTRCL under the railway project. The works will be funded by the MTRCL, therefore, do not fall under the EPIW. The design of the re-provisioned bus stops and waiting areas will be similar to that of the existing bus stops. The waiting areas will be provided with shelters for the comfort of passengers.

As mentioned above, the original footpath beside the planters opposite Tung Hing House will be diverted to the vicinity of the slope during the construction of the new bus stops. Owing to physical constraint, it can not be converted into a green area. We will discuss with the owners concerned the compensation for portions of land to be resumed in Lei Tung Estate.

We understand the local community's concern about the arrangements for pedestrians going to and fro between the Lei Tung Estate and Main Street, Ap Lei Chau. Upon commissioning of the SIL(E), the public may travel, via the unpaid concourse area of the station, to and fro between the entrance at the Lei Tung Commercial Centre on the hill and the entrance at Main Street, Ap Lei Chau below the hill.

D. South Horizons Station

We fully understand that the residents of the South Horizons, particularly those living in Block 31, are concerned about the possible privacy implications brought about by the proposed footbridge linking the Ap Lei Chau Estate to Yi Nam Road. The footbridge will be at least 14 m away from Block 31 of the South Horizons, and the height of the deck of the footbridge will be about 2 m lower than the floor of the first floor of Block 31. The Advisory Committee on the Appearance of Bridges and Associated Structures has also been consulted on the design of the proposed footbridge. The proposed footbridge will be provided with a staircase and a lift at Yi Nam Road, and as these facilities will take up part of the space of the footpath, the affected section of the footpath will be widened to no less than 2.5 m. As the width of Yi Nam Road is confined by buildings along both sides of the Road, the width of the carriageway will inevitably have to be slightly reduced, but its existing two-lane-two-way traffic arrangement will remain unchanged.

We have been in close liaison with the SDC and other groups that are concerned about the SIL(E), and we fully understand the local residents' strong demand for the railway project. We will strive to commence construction of the project in 2011 as scheduled. Thank you once again for your kind concern for the SIL(E) and we will stay in touch with you.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'GHO', written in a cursive style.

(Godfrey HO)

for Secretary for Transport and Housing

b.c.c.

| | | |
|----------------------------|----------------------------|-----------|
| Director of Highways | (Attn: Mr. NG Tak-wing) | 2714 5297 |
| Commissioner for Transport | (Attn: Mr. TANG Wai-leung) | 2827 9237 |
| | (Attn: Ms. LEE Sui-chun) | 2802 2679 |
| Southern District Office | (Attn: Miss LIN Ming) | 2553 7268 |
| MTRCL | (Attn: Mr. SIU Kam-hang) | 2798 8822 |

政府總部
運輸及房屋局
運輸科
香港花園道美利大廈



Transport and
Housing Bureau
Government Secretariat
Transport Branch
Murray Building, Garden Road,
Hong Kong

本局檔號 Our Ref.: THB (T) CR10/1016/99

來函檔號 Your Ref.: CBI/F/2/6(III)

電話號碼：2189 2187
傳真號碼：2868 5261

BY FAX (2869 6794)

14 February 2011

Ms Debbie Yau
Clerk to Public Works Subcommittee
Legislative Council Secretariat
3/F Citibank Tower
Hong Kong

(Attn: Ms Debbie Yau)

Dear Ms Yau,

**Public Works Subcommittee
Follow-up to meeting on 25 January 2011**

**Shatin to Central Link – Railway Works
Shatin to Central Link – Non-Railway Works**

I am writing to provide supplementary information in response to the questions raised by Members about the ‘Shatin to Central Link – Railway Works’ and ‘Shatin to Central Link – Non-railway Works’ at the Public Works Subcommittee meeting held on 25 January 2011.

A)(i) Economic Internal Return Rate and Financial Internal Return Rate of the Shatin to Central Link under Different Construction Costs

2. Railway projects of a large scale are generally not financially viable as they involve heavy investment on design, construction, procurement of trains, reprovisioning, enhancement works and land cost. From experience in other countries, most of such infrastructure projects are directly funded or subsidised by the Government and Hong Kong is no exception. The major consideration of the Government for implementing a railway project is whether it can generate traffic, social and economic benefits for the society instead of the amount of its financial benefit to the Government.

3. The Shatin to Central Link (SCL) is a strategic railway project which will form two strategic railway corridors, namely the “East West Corridor” and the “North South Corridor”. The SCL will serve a wide catchment of 380 000 residential and 260 000 employment population. It will carry about 1.1 million railway passengers per day and generate annual economic benefits of \$4.4 billion in terms of time saving to travellers in 2021. The new railway will also help improve the local employment situation by providing 11 000 employment opportunities during construction and another 9 600 employment opportunities when it comes into operation. When the Government decided to carry out further planning and design of the SCL in 2008, we have pointed out in the Legislative Council Brief (THB(T)CR10/1016/99) that the project is financially not viable and the major consideration for implementing the project is its traffic, social and economic benefits generated for the society.

4. Though an accurate cost estimate for the SCL is yet to be determined, we have presented the Economic Internal Return Rate of the SCL in the information papers (PWSC(2010-11)34) and PWSC(2010-11)35) submitted to the Public Works Subcommittee at the requests of the Members. Assuming a construction cost of \$60 billion, \$64 billion and \$68 billion (in September 2009 prices) respectively at different patronage levels, the results show that the Economic Internal Return Rate of SCL ranges from 5.1% to 6.9% and the SCL project is economically viable.

5. At the meeting of the Public Works Subcommittee held on 25 January 2011, Members requested information on the Financial Internal Return Rate of the

SCL be provided. The Financial Internal Return Rate has to be calculated based on an accurate cost estimate and operating cost of the SCL for the first 50 years. But it is not until early 2012 when the MTR Corporation Limited ('the MTRCL') completes the detailed design and the Administration finishes the statutory consultation process, then the Government will be able to ascertain how to fine-tune the design of the SCL to meet the actual construction requirements and to incorporate the public's views and suggestions. An accurate estimate on project cost and its operating cost can be determined by then. According to MTRCL's current estimate, the project cost for the SCL is over \$60 billion. At the request of the councilors, MTRCL has estimated the Financial Internal Return Rate of the SCL, based on a daily patronage of 1.1 million when the SCL commences operation, and different construction cost levels of \$60 billion, \$64 billion and \$68 billion (in September 2009 prices) respectively. The results show that the Financial Internal Return Rate of the SCL ranges from 1.0% to 1.5%. SCL is a service concession project to be fully funded by the Government and operated by MTRCL. By the time when the SCL is returned to the Government when the operating right is completed, expired or terminated, the railway line will still be of substantial value.

6. The above figures are worked out under a hypothetical situation. An accurate estimate on the project cost of the SCL will be submitted with the funding application for the SCL remaining works in 2012. We have to emphasise that the major consideration of the Government for implementing a railway project is whether it can generate traffic, social and economic benefits for the society instead of the amount of the financial benefit to the Government.

A)(ii) Estimated Revenue from and Financial Arrangement for the SCL

7. In the discussion papers (PWSC(2010-11)34 and PWSC(2010-11)35) submitted in January 2011 to the Public Works Subcommittee of the Financial Committee, we explained that the SCL would adopt a service concession approach for implementation. The Government will fund the provision of railway facilities of the SCL and the MTRCL will be granted a service concession to operate it. The MTRCL has to pay service concession payments to the owner of the railway. The service concession payment for the SCL payable by the MTRCL will be calculated according to the mechanism established in the Rail Merger Agreement.

In a nutshell, under the operating agreement made between the Government and the MTRCL, the revenue generated by the SCL for the entire railway network is calculated by deducting the revenue received by the railway network before and after the SCL commences operation. The resulted net income will serve as the base for calculation of the service concession payment that the MTRCL should pay to the Government, which equals 90% of the net value of the profits from the SCL (i.e. the net income from its total operating revenue after deducting the operating cost, capital replacement cost and tax payable). The remaining 10% will serve as the fee for management of the SCL during the operating period by the MTRCL. Hence, this calculation approach has included the extra revenue generated by the two railway systems.

B) The Ratios for Works Supervision, Contract Management, Technical Studies and Design Implementation Included in the On-cost Payment for the SCL Advance Works

8. To have a thorough examination on the on-cost payment for the SCL project (including the railway's major construction works and related works), we will appoint an independent consultant to help determine whether the budgeted expenses (including on-cost payment) for the SCL submitted by the MTRCL are reasonable. The independent consultant is expected to complete the audit report in early 2012 when the SCL project enters the final stage of detailed design and the statutory consultation has completed, as by then the scope of the works and the details will be well defined.

9. As the audit report from the independent consultant will not be available until 2012, we can only take the standard on-cost payment rate - 16.5% as the interim base¹ for calculating the on-cost payment when drafting the application for funding to the SCL Advance Works. When the audit report is ready, we will discuss the final rate with the MTRCL and will make necessary adjustments for the ratio when applying for the funding to the remaining railway and non-railway works of the SCL in 2012.

10. The on cost payment to the MTRCL is the actual expenses for the MTRCL's management fee for the SCL project, which is to reimburse the

¹ The Government has conducted detailed study and discussed in detail the on-cost rate with the MTRCL. In 2003, both parties agreed to use an on-cost rate of 16.5% for entrustment of works to each other.

expenses on technical studies, implementation of designs, works supervision and contract management for the advance works of the SCL project. A breakdown of the management cost is as follows:

| | | |
|---------|--|------|
| (a) | Supervision of construction works | 81% |
| (b) | Contract management | 10% |
| (c) | Technical studies and design implementation | 6% |
| (d) | Others (such as community liaison, information technology) | 3% |
| Total : | | 100% |

C) Patronage Distribution when the SCL Commences Operation in 2012 and the Changes in Existing Railway Patronage

11. The estimate on patronage to the SCL is compiled by making use of a transport model with reference to a multitude of data and statistical information, including population, employment distribution, socio-economic data, updated planning information and developments of Hong Kong, as well as comparisons among major railway and road networks such as routes, travelling hours, frequencies, fees, station locations and interchange arrangements, and systematically projects its redistribution pattern.

12. In 2021, it is expected there will be about 1.1 million passengers using the SCL per day. The projected patronage can be categorised as:

- (a) **New Passengers:** switch from non-railway transport modes such as bus and private car to the SCL;
- (b) **Passengers Diverted from Existing Lines:** passengers currently using the Tsuen Wan Line, Tung Chung Line and Tseung Kwan O Line for harbour crossing, and passengers using the East Rail Line interchange for Kwun Tong Line heading for East Kowloon; and
- (c) **Existing Railway Passengers Using the SCL to Replace Other Interchange Transport Mode:** passengers currently taking the East Rail Line interchange for buses to destinations at To Kwa Wan and Ho

Man Tin will switch to the SCL, and passengers currently taking the East Rail Line and the West Rail Line to Hung Hom and interchange for cross-harbour buses to Hong Kong Island will switch to use the SCL.

13. Breakdowns of the estimated patronage for the SCL:

| | |
|---|-------------|
| New Passengers | 380 000 |
| Passengers Diverted from Existing Lines | |
| (a) <u>Cross-harbour section</u> | |
| Tsuen Wan Line | 150 000 |
| Tung Chung Line | 20 000 |
| Tseung Kwan O Line | 20 000 |
| (b) <u>From North-east New Territories to East Kowloon</u> | |
| Kwun Tong Line | 70 000 |
| | 260 000 |
| Existing Railway Passengers Using the SCL to Replace Other Interchange Transport Mode | 460 000 |
| Total Patronage | 1.1 million |

14. MTRCL now operates 5 railway lines providing railway services to various districts² - Tsuen Wan Line, Tung Chung Line, Tseung Kwan O Line and Kwun Tong Line and Island Line. As shown in the above table, it is estimated that around 260 000 passengers will be diverted from the first four railway lines to the SCL, but the operation of the SCL will bring an increase of around 70 000 passengers for the existing Island Line, of which around 40 000 head for Central to Kennedy Town and around 30 000 for Wan Chai to Chai Wan.

15. We also estimate that if the patronage of the SCL increases 10%, i.e. the daily passengers total around 1.21 million, the distributions of the patronage will become:

| | |
|---|---------|
| New Passengers | 420 000 |
| Passengers Diverted from Existing Lines | |

² Not including Disneyland Resort Line and Airport Express

| | |
|---|--------------|
| (a) <u>Cross-harbour section</u> | |
| Tsuen Wan Line | 170 000 |
| Tung Chung Line | 20 000 |
| Tseung Kwan O Line | 20 000 |
| (b) <u>From North-east New Territories to East Kowloon</u> | |
| Kwun Tong Line | 80 000 |
| | 290 000 |
| Existing Railway Passengers using the SCL to Replace Other Interchange Transport Mode | 500 000 |
| Total Patronage | 1.21 million |

16. Similarly, the operation of the SCL will bring an increase of around 80,000 passengers for the existing Island Line, of which around 50 000 head for Central to Kennedy Town, and 30 000 for Wan Chai to Chai Wan.

D) Information on and Scope Involved in the Possible Ground Enhancement Works of the SCL

17. The detailed design of the SCL (Tai Wai to Hung Hom Section) includes site investigations and detailed inspection of the nearby buildings along the railway line. Currently, the design team commissioned by the MTRCL is conducting assessment and evaluation of those buildings' designs and building plans, foundation information, repairing orders by the Buildings Department, as well as warnings of unauthorised structures etc. The detailed design also comprises overall evaluation of the existing conditions of the buildings which include investigating the buildings' external walls and public areas. The site investigation team is currently conducting surveys in To Kwa Wan to ascertain the geological conditions of the district.

18. In the detailed design stage, MTRCL will carry out geotechnical evaluation and formulate monitoring plans. The results will be submitted to the Highways Department and other relevant government departments for examination. The concerned departments (such as the Highways Department and the Geotechnical Engineering Office of the Civil Engineering and Development Department) will conduct assessments on the construction, structure and

geotechnical works under their jurisdiction in accordance with the relevant technical requirements, to ensure that all designs comply with the stipulated standards and the safety regulations.

19. Ma Tau Wai Station of the SCL and its connecting tunnels will be built under Ma Tau Wai Road. We are exploring the most suitable construction method to ensure that the conditions of the buildings nearby remain unchanged. Possible methods include construction of diaphragm walls and crosswalls in the pit when carrying out excavation, carrying out ground enhancement works, as well as installing a monitoring system in the nearby buildings.

20. To ensure that the conditions of the nearby buildings are unaffected when constructing the Ma Tau Wai Station, the design team is examining the conditions of the buildings between Chi Kiang Street and Tin Kwong Road, so as to ascertain if ground enhancement works such as cement grouting for reinforcement of soils should be carried out for individual buildings, and the installation of monitoring systems. The MTRCL has allowed the cost for ground enhancement works for the buildings. The MTRCL is conducting detailed investigations to assess the extent of ground enhancement works.

21. I should be grateful if you would kindly relay the above information to members of the Financial Committee for reference.

Yours faithfully,



(C W CHOW)

for Secretary for Transport and Housing

| | | |
|-------------|------------------------|------------------|
| c.c. SFST | (Attn: Ms. Joyce Ho) | (Fax: 2147 5240) |
| PGE/RD, HyD | (Attn: Mr. Henry Chan) | (Fax: 2714 5297) |
| MTRCL | (Attn: Mr. Henry Lam) | (Fax: 2795 8410) |