Legislative Council Panel on Transport Subcommittee on Matters Relating to Railways

Progress Update of the Construction of the West Island Line, South Island Line (East) and Kwun Tong Line Extension

Introduction

This paper reports to Members on the progress of the main construction works of the West Island Line ("WIL"), South Island Line (East) ("SIL(E)") and Kwun Tong Line Extension ("KTE") (as at 31 December 2015).

Background

WIL

2. WIL is an approximately three-kilometre long railway extension of the existing Island Line running from Sheung Wan Station to Kennedy Town Station with two intermediate stations at Sai Ying Pun and the University of Hong Kong (the alignment is at **Annex 1**). In 2009, the estimated capital cost of WIL was \$15,400 million (in December 2008 prices). According to the estimation of the MTR Corporation Limited ("MTRCL") in November 2014, the revised capital cost of WIL is estimated to be \$18,500 million (in money-of-the-day prices).

SIL(E)

3. SIL(E) is a new railway corridor running from South to North of Hong Kong Island. It starts from South Horizons on Ap Lei Chau to Admiralty via Lei Tung, Wong Chuk Hang and Ocean Park with a total length of about seven kilometres (the alignment is at **Annex 2**). SIL(E) will connect the MTR Island Line, Tsuen Wan Line and the future Shatin to Central Link ("SCL") at Admiralty Station. The existing Admiralty Station will be expanded to form an integrated station for the four lines to provide seamless interchanges for passengers. In 2011, the estimated capital cost of SIL(E) was \$12,400 million (in December 2009 prices). MTRCL advised in November 2014 that the cost had increased to \$15,200 million (in money-of-the-day prices). According to the report submitted by MTRCL to the Legislative Council ("LegCo") Subcommittee on Matters

Relating to Railway ("RSC") in August 2015, the estimate of the construction cost of SIL(E) had been further revised upward to \$16,900 million (in money-of-the-day prices) due to the complexity of the project and continued challenges encountered.

KTE

4. KTE is an approximately 2.6-kilometre long railway extension of the existing Kwun Tong Line running from Yau Ma Tei Station to the new Ho Man Tin Station and Whampoa Station (the alignment is at **Annex 3**). In 2011, the estimated capital cost of KTE was \$5,300 million (in December 2009 prices). Owing to the complexity of the project and continued challenges encountered, in the report submitted by MTRCL to the LegCo RSC in August 2015, the estimate of the construction cost of KTE had been adjusted upward to \$7,200 million (in money-of-the-day prices).

Project Implementation and Funding Mode

- 5. WIL, SIL(E) and KTE, being the extensions of the existing railway networks owned by MTRCL, are 'ownership' projects. Under the 'ownership' approach, MTRCL will be responsible for the financing, design, construction, operation and maintenance of these railway projects, and will own the railways. The Government and MTRCL signed the Project Agreement for WIL in July 2009, and the Project Agreements for SIL(E) and KTE in May 2011. The original target commissioning dates are August 2014 for WIL, and December and August 2015 for SIL(E) and KTE respectively.
- 6. The construction cost of the railways is so enormous that WIL, SIL(E) and KTE are not considered financially viable based on their fare and non-fare revenues alone. Funding support to MTRCL is needed from the Government to bridge the funding gaps¹ of the projects.

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A railway is considered not financially viable if the present value of all its projected revenues net of projected expenditures falls short of the expected return on capital. During the initial public offering ("IPO") of MTRCL in 2000, the Government acknowledged to investors through the IPO Prospectus that the return required by MTRCL for any new railway project would ordinarily be between 1% and 3% above the Weighted Average Cost of Capital ("WACC"). This shortfall is known as the funding gap.

- 7. To implement SIL(E) and KTE projects, the Government granted the property development rights under the 'Rail-plus-Property Model' to bridge the funding gaps of the projects with caution that the land to be granted to MTRCL should not be more than what is required to bridge the funding gaps. As such, the Government granted in 2011 the topside property development rights at Wong Chuk Hang Depot and Ho Man Tin Station for the implementation of SIL(E) and KTE projects respectively.
- 8. Being granted the property development rights, MTRCL is responsible for all the costs of the property development as well as the construction and operating costs of the railway projects. In addition, it has to bear long term risks in financing the projects, operating the railways, and market fluctuations in rail and property developments. The design philosophy of the 'Rail-plus-Property Model' is to strike a fair balance of risks and benefits between the Government and MTRCL. As the SIL(E) and KTE are ownership projects, MTRCL will be responsible for the additional expenditure arising from the delay of the railway works.
- 9. For WIL, due to the lack of suitable sites for property development along or adjacent to the alignment, the Government decided in 2009 to provide a non-recurrent capital grant of \$12,700 million (Net Present Value in June 2009) as the ceiling of the funding support to bridge the funding gap of the project.

Essential Public Infrastructure Works related to Railway Projects

10. In order to tie in with the commissioning of WIL, SIL(E) and KTE, the Government also entrusted the implementation of the associated 'Essential Public Infrastructure Works' ("EPIW") to MTRCL. They include construction and improvement of the pedestrian and linking facilities for providing convenient access to railway stations so that the consequential social and economic benefits of the railways can be fully realised. EPIW, which are constructed in parallel with the railway works, include:-

EPIW of WIL (Layout plan at Annex 4)

(i) a covered pedestrian link at Sands Street, including a lift tower at the junction of Sands Street and Rock Hill Street with a single-way escalator;

- (ii) a footbridge across Pok Fu Lam Road for connecting to the University of Hong Kong Centennial Campus; and
- (iii) a boarding and alighting area for green minibuses at Kennedy Town Station.

EPIW of SIL(E)(Layout plan at Annex 5)

- (i) construction of public transport facilities underneath Wong Chuk Hang Station; improvement of the road network in the vicinity of Ocean Park Station and Wong Chuk Hang Station;
- (ii) modification of a section of Wong Chuk Hang Nullah between Ocean Park Road and Nam Long Shan Road;
- (iii) construction of a covered footbridge connecting Wong Chuk Hang Station with the adjacent industrial area and a covered footbridge linking the western part of Ap Lei Chau Estate to Yi Nam Road near Precious Blood Primary School; and
- (iv) construction of a pedestrian link to Aberdeen Channel Promenade and improvement of the road junctions of Ap Lei Chau Drive and Ap Lei Chau Bridge Road.

EPIW of KTE (Layout plan at Annex 6)

- (i) construction of a pedestrian link system connecting Ho Man Tin Station to Ho Man Tin Estate, Oi Man Estate and the Hung Hom area south of Chatham Road North, which includes covered footbridges, covered walkways and subways;
- (ii) construction of a footbridge integrating with the existing footbridge across Chatham Road North and connecting Ho Man Tin Station to Wuhu Street; and
- (iii) construction of a public transport facility at Chung Hau Street near Ho Man Tin Station.

Latest Progress of the Works

11. MTRCL has submitted progress reports on WIL, SIL(E) and KTE (as at 31 December 2015) at **Annexes 7** to **9** respectively. The analysis and supplement made by the Highways Department ("HyD") on these progress reports are provided below.

WIL

- 12. WIL, together with HKU Station and Kennedy Town Station, was commissioned on 28 December 2014 whilst Sai Ying Pun Station (except Ki Ling Lane Entrance) was subsequently completed and opened on 29 March 2015. All the three stations of WIL are now opened to the public. All EPIW related to WIL have also been completed.
- 13. The structural works of the passenger adit between Ki Ling Lane Entrance and First Street/Second Street Entrance were completed. The structural works, architectural and building works, electrical and mechanical works as well as escalator installation for Ki Ling Lane Entrance are still underway. Except for one passenger lift, MTRCL anticipated that the target commissioning date of Ki Ling Lane Entrance would be the first quarter of 2016. In view of the current progress as at end December 2015, in order to meet the above target, MTRCL would have to, in accordance with a compressed timetable, complete the remaining works and make timely submission of documents and drawings to relevant government departments to facilitate the statutory inspections and approvals. MTRCL had deployed additional manpower with extended working hours in order to complete the remaining works on time. HyD would closely monitor the progress of works and the state of construction. As regards the remaining one passenger lift, MTRCL anticipated that the commissioning date of it would be the second quarter of 2016. At the moment, there are 10 serving lifts in other entrances for passengers to travel between the concourse of Sai Ying Pun Station and the ground level.

SIL(E)

14. The expansion works at Admiralty Station for SIL(E) involve the addition of three underground levels below Harcourt Garden east of the existing station and the construction of an approximately 200m long overrun tunnel for SCL. The additional three underground levels include one level for interchange and two levels for train platforms. The platforms at the upper level are reserved for the use of SCL while the platforms for SIL(E) are at the lowest level. Upon expansion, Admiralty Station will become an integrated station serving passengers of Island Line, Tsuen Wan Line, SCL and SIL(E). Hence, except that the

construction cost (about \$300 million in money-of-the-day prices) of the overrun tunnel of SCL which would be fully absorbed by the SCL project, the construction cost of the expansion works of Admiralty Station will be apportioned between SCL and SIL(E) projects at a ratio of 70:30 in accordance with the estimated patronage at peak hours at the station. According to the cost estimate in 2011, SCL project has to share about \$2,700 million (in money-of-the-day prices) for the costs of building works, building services works, electrical and mechanical works for the portion of SCL at Admiralty Station. Besides, the SCL project has to share about 350 million for the costs of the portion of ventilation facilitates at Admiralty Station for SCL. Hence, the SCL will have to share an overall cost of about \$3,350 million (in money-of-the-day prices) at Admiralty Station. MTRCL advised HyD on 12 August 2015 that the completed cost estimate review of the expansion works of Admiralty Station of SIL(E) indicated an upward adjustment of the relevant cost of expansion works of Admiralty Station to be shared by SCL. According to the apportionment ratio of 70:30 above, the cost shared by SCL has to be adjusted upward from about \$3,350 million to about \$4,650 million with an increase of about \$1,300 million. HyD has commented and raised questions on the preliminary information provided by MTRCL and requested for further details. After MTRCL has submitted further information, HyD will continue to critically examine the latest cost estimate with the assistance of its monitoring and verification consultant.

- 15. In order to connect the expansion part with the platforms of SIL(E) and SCL, underpinning works for the existing tunnel of the Island Line have to be carried out for excavation underneath. The excavation for the underpinning works was completed in December 2015. However, the progress of excavation has not resulted in the recovery of delay, which has in turn affected the progress of the subsequent structural works for the station expansion. MTRCL reported to LegCo RSC in November 2014 that its target was to commission SIL(E) at the end of 2016. MTRCL submitted the revised baseline programme to HyD in early September 2015 with the target commissioning date at the end of 2016. As at 31 December 2015, the structural works for the expansion of the station was about 1 week behind target and the overall progress was generally on schedule, but the programme for the remaining works will be very compressed and MTRCL has to improve the progress effectively.
- 16. The overall progress of the Nam Fung Tunnel connecting Admiralty Station and Ocean Park Station as well as other railway facilities at Wong Chuk Hang and Ap Lei Chau generally meets the revised works schedule. HyD will

closely monitor the work progress of the relevant works and review the information of the work progress provided by MTRCL on a regular basis.

- 17. For the EPIW entrusted by the Government to MTRCL mentioned in paragraph 10 above, the modification of a section of Wong Chuk Hang Nullah between Ocean Park Road and Nam Long Shan Road has been completed, while the covered footbridge linking the western part of Ap Lei Chau Estate to Yi Nam Road near Precious Blood Primary School and the new slip road completed under the improvement works of the road junctions of Ap Lei Chau Drive and Ap Lei Chau Bridge Road have been opened. Due to the underground utilities and the electrical power connection works which are more complicated than expected, the construction of a pedestrian link to Aberdeen Channel Promenade is expected to be completed in the first quarter of 2016, which is about 8 months later than the completion date stated in the entrustment agreement. Furthermore, as the existing underground utilities are more complicated than expected, construction of the public transport facilities underneath Wong Chuk Hang Station and the widening of Heung Yip Road are expected to be completed in the first half of 2016, which is about 9 months later than the completion date stated in the entrustment agreement. The construction of a covered footbridge connecting Wong Chuk Hang Station with the adjacent industrial area has been completed and it will be opened together with the improved road network in the vicinity of the station. The progress of the above works will not affect the target commissioning of SIL(E) in end 2016.
- According to the revised cost estimate advised by MTRCL to HyD on 12 August 2015, EPIW of SIL(E) may exceed the approved project estimate² by about \$190 million. MTRCL informed HyD on 14 December 2015 that the revised cost would exceed the approved project estimate by about \$220 million. HyD has requested MTRCL to provide further information for scrutiny.
- 19. On the whole, MTRCL maintains the target of commissioning SIL(E) at the end of 2016. Although the progress of works at various sections of Admiralty Station has matched the targets in the revised programme, the programme shows that the timetable for remaining works of the station has been highly compressed. Hence, MTRCL has to improve the efficiency of every aspect of the expansion works at Admiralty Station and expedite the remaining works to achieve the revised target commissioning at the end of 2016. HyD has

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² In 2011, the estimated capital cost of EPIW of SIL(E) was \$927 million (in money-of-the-day prices).

asked MTRCL to provide more detailed information to substantiate the feasibility of the arrangement of the remaining construction works.

KTE

- 20. Ho Man Tin Station will be an integrated station connecting both SCL and KTE and providing convenient interchange for passengers travelling on these two railway lines. The construction cost of Ho Man Tin Station is therefore apportioned between SCL and KTE projects at a ratio of about 74:26 in accordance with the estimated patronage at peak hours at the station. According to the cost estimate in 2011, the SCL project has to share about \$2,900 million (in money-of-the-day prices) for the costs of building works, building services works, E&M works for the portion of SCL at Ho Man Tin Station. MTRCL advised HyD on 12 August 2015 that the completed cost estimate review of KTE indicated that the relevant construction cost of Ho Man Tin Station shared by SCL would still remain within the budget. However, the EPIW of KTE entrusted by the Government to MTRCL may exceed the approved project estimate³ by about \$75 HyD has commented and raised questions on the preliminary million. information provided by MTRCL and requested for further details. MTRCL has submitted further information, HyD will continue to critically examine the latest cost estimate.
- 21. MTRCL reported to the LegCo RSC in August 2015 that the target to commission the KTE would be in the third or fourth quarter of 2016. MTRCL formally submitted a revised programme to HyD in mid-October 2015. MTRCL is currently engaged in the electrical and mechanical works and building services installation of Ho Man Tin Station in full swing according to the revised programme.
- 22. The track laying works in the section between Ho Man Tin and Whampoa and the structural works of Whampoa Station ("WHA") were substantially completed in November and December 2015 respectively. MTRCL is currently committed in the electrical and mechanical works and building services installation of WHA according to the revised programme and carrying out measures of adjusting the works sequence and increasing manpower to further improve the construction progress. Moreover, MTRCL has completed most of the services installation inside the tunnels of KTE and plans to start a series of

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³ In 2011, the estimated capital cost of EPIW of KTE was \$826.9 million (in money-of-the-day prices).

testing for the trains in the first quarter of 2016.

- 23. The delay in the construction of Ho Man Tin Station earlier has affected the progress of part of the EPIW connecting to Ho Man Tin Station, including the two pedestrian subways for crossing Fat Kwong Street and Chung Hau Street, part of the footbridge connecting to Ho Man Tin Station, as well as the public transport facility at Chung Hau Street in the vicinity of Ho Man Tin Station. The above EPIW are expected to be available for public use at the same time as the commissioning of KTE. The remaining EPIW, including the footbridges at Chung Yee Street, Sheung Lok Street and Fat Kwong Street and the covered walkway, were substantially completed and opened to the public in mid-December 2015.
- 24. HyD monitors the progress of various items through reports on work progress provided by MTRCL, regular progress meetings with MTRCL and site visits. It also discusses with MRTCL and co-ordinates with related government departments to help MTRCL resolve problems encountered in the course of works. Through progress meetings and letters to MTRCL, HyD, has on a number of occasions, requested MTRCL to confirm the commissioning programme of KTE and provide progress briefings and detailed works programmes on the major construction activities. In response to the requests of HyD, MTRCL has provided HyD with regular progress briefs on major works processes, and has improved the works sequence, increased manpower and machinery, and adjusted the E&M and fitting-out works to further improve the construction progress.
- 25. Based on the information available to HyD, given the structural works of the WHA were substantially completed in the fourth quarter of 2015, the revised target commissioning date of MTRCL (i.e. the third or fourth quarter of 2016) would be achievable. HyD will continue to closely monitor the progress of the works.

Conclusion

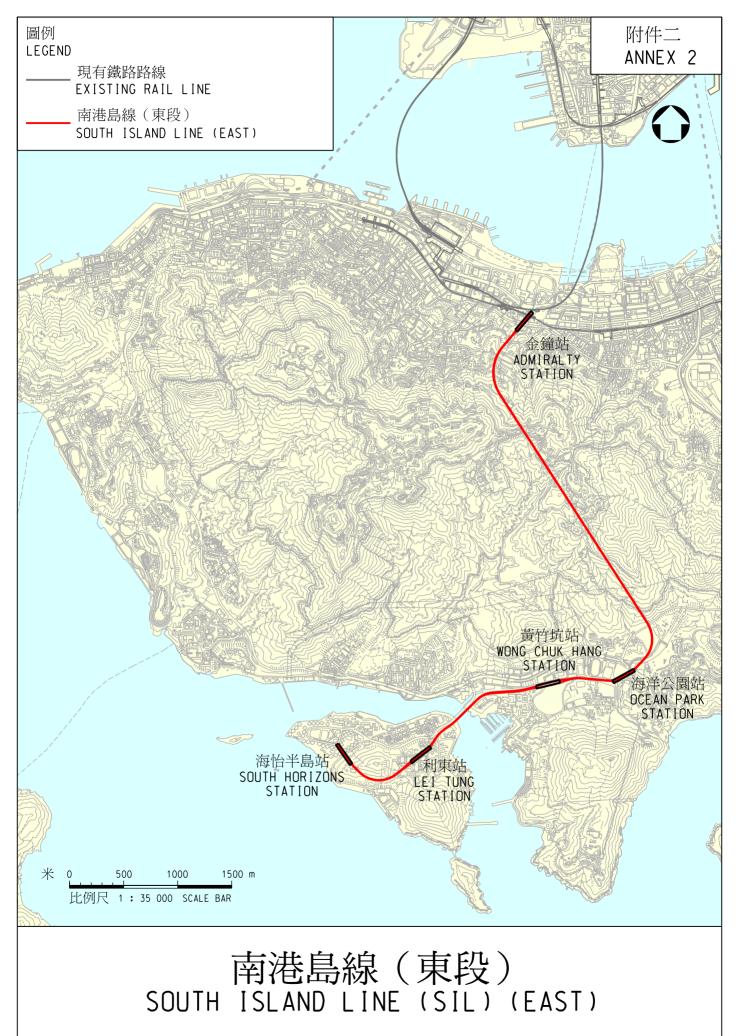
26. We will continue to closely monitor the progress of the remaining works and system testing of the Ki Ling Lane Entrance of WIL for its commissioning in the first quarter of 2016. Regarding SIL(E), although the overall progress of works at different sections has generally matched the targets set in the revised

programme for the target commissioning at the end of 2016, the revised works programme shows that the timetable for remaining works of the expanded Admiralty Station has been highly compressed. HyD has asked MTRCL to provide more detailed information to substantiate the feasibility of the revised programme. For KTE, MTRCL has revised the target commissioning date to the third or fourth quarter of 2016. We are of the view that since MTRCL has substantially completed the structural works of WHA in the fourth quarter of 2015, it would be able to achieve the revised target commissioning date. Nonetheless, the above railways are ownership projects and MTRCL will bear the additional expenditure arising from the delay of these railway works.

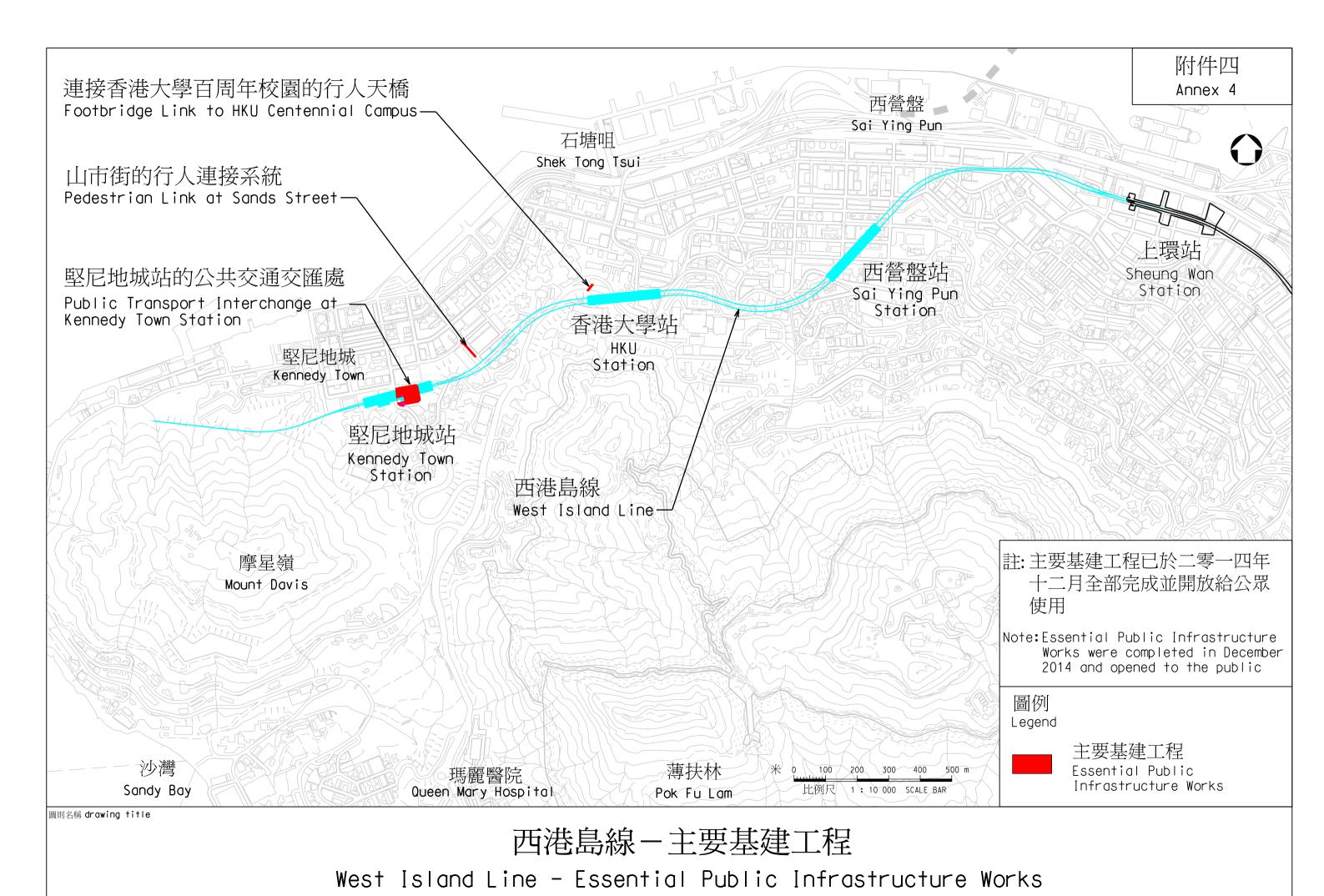
27. The above railway works are major underground infrastructure projects of a considerable scale. There are various difficulties and challenges encountered in the course of construction. It is unavoidable that there are deviations from the original plan for individual works contracts. MTRCL has adjusted its works sequence having regard to the actual situation of work sites. Additional manpower and machinery have also been deployed to particular construction activities in order to overcome the difficulties. The Government will fully assist MTRCL to resolve problems encountered in the construction works as early as possible and closely monitor MTRCL to ensure the remaining works are progressing according to the revised programme for target commissioning of the projects.

Transport and Housing Bureau Highways Department February 2016

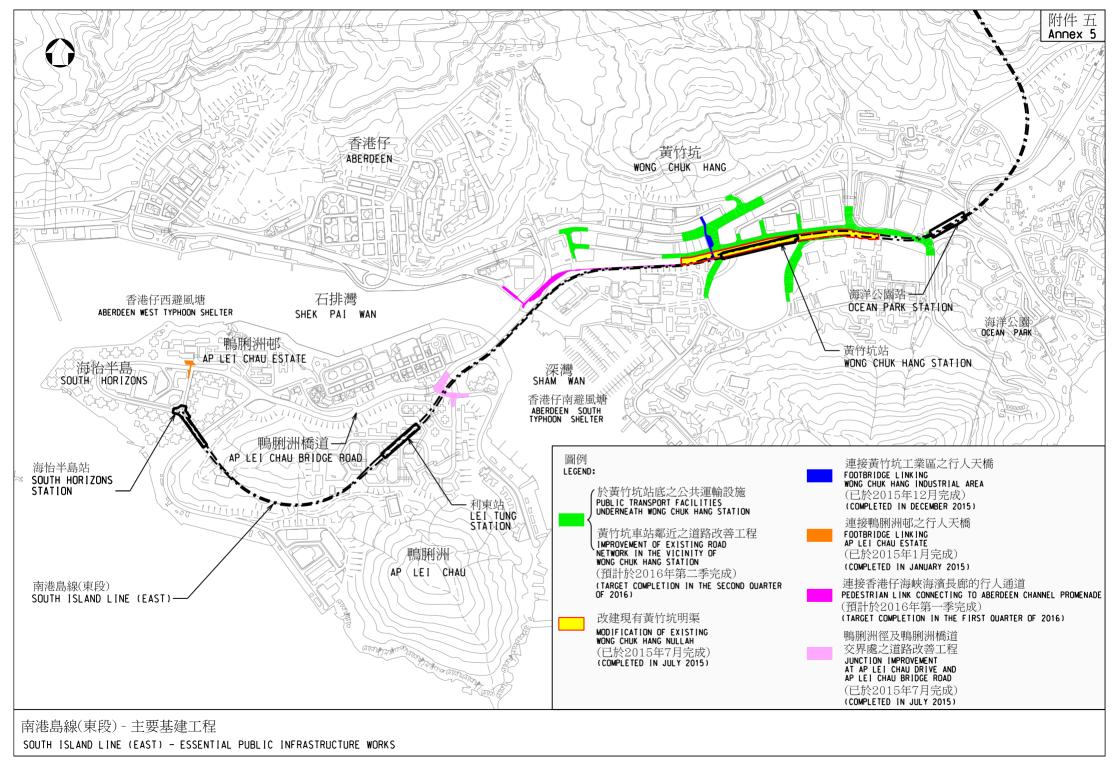


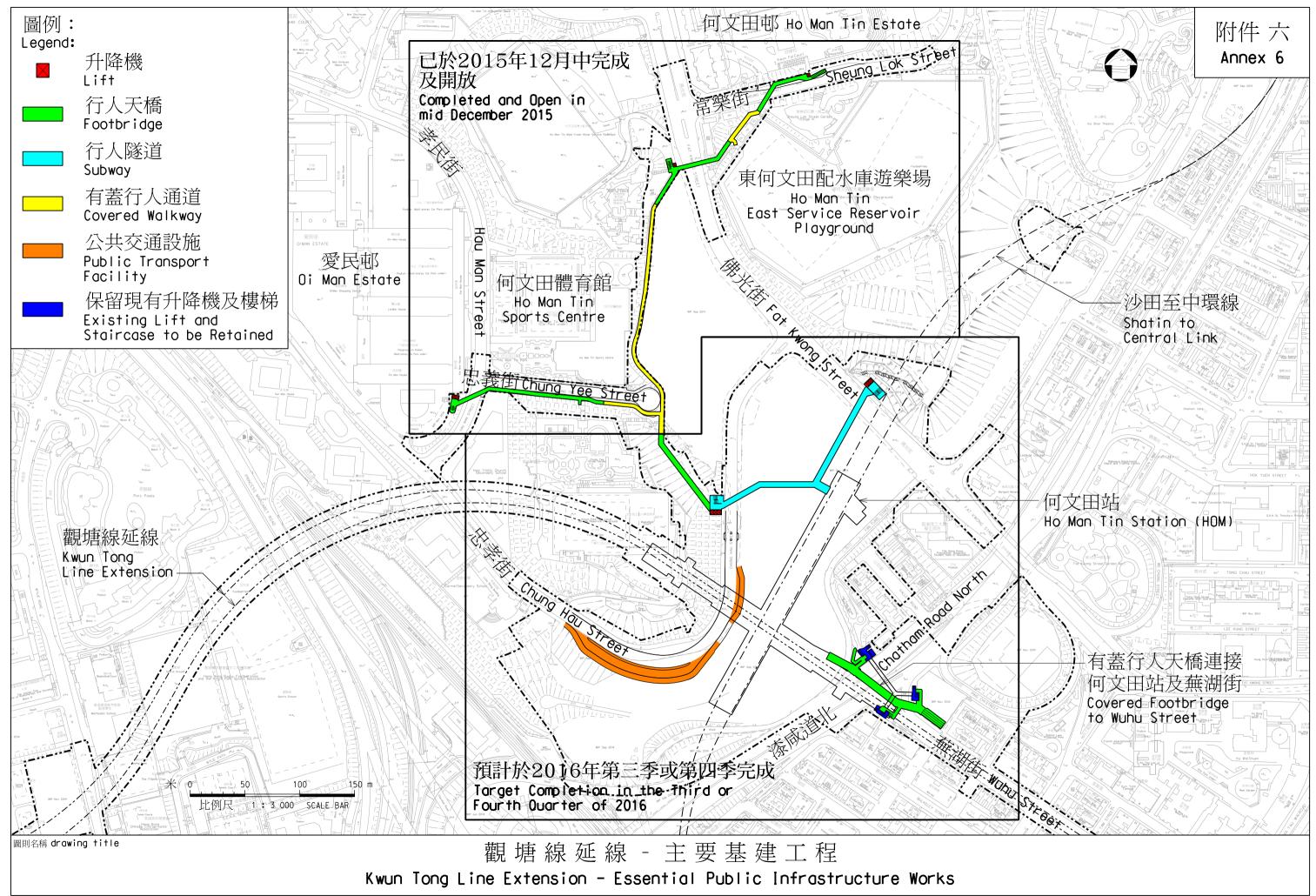






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Legislative Council Panel on Transport Subcommittee on Matters Relating to Railways

Progress Update of the West Island Line

(As at 31 December 2015)

This paper briefs Members on the latest progress of the outstanding station works of the West Island Line (WIL).

Background

- 2. The MTR Island Line has been extended from Sheung Wan Station (SHW) to Kennedy Town Station (KET) with two intermediate stations, Sai Ying Pun Station (SYP) and HKU Station (HKU) since December 2014. Overall, train service has been operating smoothly.
- 3. At SYP, construction works of the station entrance at Ki Ling Lane continue.

Latest Construction Progress

- 4. The structural works of the remaining 20-metre passenger adit at the Ki Ling Lane entrance of SYP are now completed with architectural builder works and finishes, building services, and electrical and mechanical as well as escalator installation in both the adit and entrance structure well under way for subsequent inspections by relevant government departments.
- 5. Given the current construction progress, the Ki Ling Lane entrance is expected to be opened for public use in the first quarter of 2016 as reported previously. Proper protection measures are in place to ensure that the construction activity would not affect the station operations and passengers.
- 6. As the lift shaft is required for site access for delivery of construction materials, the lift installation can only be carried out until most of the works at the adit have been completed. It is expected that the passenger lift at the Ki Ling Lane entrance will commence service in the second quarter of 2016.

Conclusion

7. Members are invited to note the above information.

MTR Corporation Limited February 2016

Legislative Council Panel on Transport Subcommittee on Matters Relating to Railways

Progress Update of the South Island Line (East)

(As at 31 December 2015)

Purpose

This paper aims to provide an update on the works progress of the South Island Line (East) (SIL(E)) project as at 31 December 2015.

Background

- 2. SIL(E) is a 7-kilometre, medium-capacity railway that connects the Southern District with the existing railway network in Hong Kong through tunnels and viaducts with stations at Ocean Park, Wong Chuk Hang, Lei Tung and South Horizons. A train maintenance depot is located in Wong Chuk Hang.
- 3. To enhance convenience for the residents of Southern District, the project also includes the construction of a number of Essential Public Infrastructure Works (EPIW) in addition to the railway. These include the construction of public transport facilities under Wong Chuk Hang Station; improvement of the existing road network in the vicinity of Ocean Park and Wong Chuk Hang stations; the construction of a covered footbridge connecting Wong Chuk Hang Station with the adjacent industrial area; the construction of a covered footbridge crossing Ap Lei Chau Bridge Road to link the western part of Ap Lei Chau Estate to Yi Nam Road near the Precious Blood Primary School; and the construction of a pedestrian link to the Aberdeen Channel Promenade, etc.
- 4. Construction of SIL(E) commenced in 2011. Upon commissioning, it will provide convenient and fast railway service for the 350,000 residential and working populations in Southern District. The journey time from Admiralty to Ocean Park will be reduced from the current 25 to 45 minutes to just 4 minutes. The train ride from Admiralty to South Horizons will take approximately 11 minutes. The frequency of train service will be about 3 minutes during peak periods.

Project Progress

5. The SIL(E) project is expected to be completed to open for passenger service at the end of 2016. To better reflect the actual works progress of the project, the progress in this report is measured against the above updated project completion target, i.e. end 2016. As at 31 December 2015, the overall works for SIL(E) are 93% complete compared to the planned project completion rate of 93.9%. In view of the current progress, the target opening of SIL(E) is maintained at end 2016.

Stations and Depot in Southern District

6. Following the completion of structural works for Ocean Park Station, Wong Chuk Hang Station and Wong Chuk Hang Depot, fitting-out and electrical and mechanical (E&M) works have also been completed. Both stations and the Depot have now entered pre-operational phase and a series of testing and preparatory work is underway to pave way for future operation.



Structural works of the covered footbridge connecting Ocean Park Station to the theme park's entrance are completed



Fitting-out and E&M works of Wong Chuk Hang Station are completed

7. Structural works for Lei Tung Station (except Entrance B) are completed with fitting-out and E&M works in progress. For Entrance B at Lei Tung Estate, unforeseen adverse ground conditions encountered earlier at the shaft formation level has caused delay to the commencement of structural works. At present, the shaft structural works are substantially completed while the fitting out and E&M works are in progress. The completion of the entrance structure and fitting-out works as well as the installation of passenger lifts is expected to continue into the first half of 2016, but the station will still be ready for the overall opening schedule of SIL(E) which is targeted for the end of 2016.



Above-ground structural works of Lei Tung Station Entrance B

8. At South Horizons Station, excavation and structural works for the station box under the temporary traffic deck have been completed with fitting-out and E&M works in progress. Structural works for the station entrances are substantially completed. Structural works for the End Plant Building at Yuk Kwai Shan and the ventilation building at Lee Wing Street have been completed with fitting-out and E&M works underway.



Fitting-out and E&M works at South Horizons Station

Track-related Works and Train Testing

- 9. Construction of Nam Fung Tunnel, Ap Lei Chau Tunnel and the viaduct has been completed. All track-laying works between Admiralty Station and South Horizons Station are substantially completed, while the installation of overhead lines and trackside auxiliary services have been completed from Ocean Park Station to South Horizons Station and those in the section between Ocean Park Station and Admiralty Station are substantially complete. Meanwhile, all track areas inside Wong Chuk Hang Depot, and from Wong Chuk Hang Station to South Horizons Station have been energised.
- 10. Upon the arrival of 10 new trains of SIL(E) at Wong Chuk Hang Depot, on-track testing of the trains between Wong Chuk Hang and South Horizons stations have begun in April 2015. The section of track between Ocean Park Station and Admiralty Station will be ready for the testing of trains in the first quarter of 2016.

Essential Public Infrastructure Works (EPIW)

- 11. Construction of a covered footbridge crossing Ap Lei Chau Bridge Road to link the western part of Ap Lei Chau Estate to Yi Nam Road near the Precious Blood Primary School has been completed and opened for public use in January 2015. Modification works for the existing Wong Chuk Hang Nullah have been completed and the new slip road connecting Ap Lei Chau Drive from Ap Lei Chau Bridge Road was opened in July 2015.
- 12. In the Wong Chuk Hang area, as the existing underground utilities are found to be more complex than anticipated, the construction of the public transport facilities under Wong Chuk Hang Station and the widening of Heung Yip Road are behind the original programme and expected to be completed in the second quarter of 2016. The construction of the pedestrian link to Aberdeen Channel Promenade is substantially complete with the remaining works for the lighting power supply expected to be completed in the first quarter of 2016. For the covered footbridge connecting Wong Chuk Hang Station to the north side of Wong Chuk Hang Road, the construction is expected to be completed in the first half of 2016.

Admiralty Station Extension

13. Admiralty Station is undergoing expansion to an interchange station for the Island Line, Tsuen Wan Line, SIL(E) and Shatin to Central Link (SCL). There are three levels at the existing Admiralty Station including one concourse level and two platform levels serving passengers on the Tsuen Wan Line and

Island Line. The extension works of Admiralty Station are being carried out under Harcourt Garden, east of Admiralty Station, with three additional levels being constructed below the existing station.

- 14. The extension works of Admiralty Station as part of the SIL(E) project include the construction of a cut-and-cover station box and platforms for the SIL(E) and SCL at Harcourt Garden. The works also cover two overrun tunnels for SCL, each with an approximate length of 200 metres. Excavation for the platforms and tunnels of SIL(E) and the platform tunnels of SCL was completed in May 2015. As for the Hong Kong Park Ventilation Building, the structural works and fitting-out works are underway.
- 15. Admiralty Station extension works have encountered considerable challenges particularly in respect of the underpinning excavation works beneath the tunnel structure of the existing Island Line. As a result of the continuous efforts made by the construction team, the underpinning excavation works have been completed at the end of 2015. Meanwhile, the cut-and-cover excavation is substantially completed and construction of the station structures, fitting-out and E&M works are now progressing according to schedule. Challenge remains for these works and the Corporation will continue to work closely with its contractors to ensure that sufficient manpower is secured to achieve the required progress.



Structural works continue for the Admiralty Station extension

Conclusion

16. Members are invited to note the above information.

MTR Corporation Limited February 2016

Legislative Council Panel on Transport Subcommittee on Matters Relating to Railways

Progress update of the Kwun Tong Line Extension (As at 31 December 2015)

Background

The Kwun Tong Line Extension (KTE) project is a 2.6-kilometre underground extension of the existing Kwun Tong Line from Yau Ma Tei Station to the newly built Whampoa Station, with an intermediate station at Ho Man Tin. Ho Man Tin Station being constructed under KTE will be an interchange station with the future Shatin to Central Link (SCL). Construction of the KTE project commenced in 2011.

- 2. To facilitate convenient access to railway service for local commuters, Essential Public Infrastructure Works (EPIW) are being constructed alongside the railway works. These include a series of pedestrian walkways connecting Ho Man Tin Station to Oi Man Estate and Ho Man Tin Estate, a covered footbridge across Chatham Road North, and public transport facilities at Chung Hau Street.
- 3. As reported to the Subcommittee previously, it is anticipated that the train service of KTE will commence in the 3rd or 4th quarter of 2016.

Project Progress

- 4. As of 31 December 2015, the overall works for KTE are 91.3% complete, which is progressing in line with the target completion date in the 3rd or 4th quarter 2016. Approximately 97.4% of civil works and 71% of the electrical and mechanical (E&M) works have been completed.
- 5. With the substantial completion of structural works at Ho Man Tin Station and Whampoa Station, the construction of KTE is at the final fitting out stage. The E&M works including the installation of the overhead lines, communication system, main control and signalling systems are in full swing in both stations.

Railway Tunnelling and Track Works

6. The structural works and track laying for the railway tunnels between Yau Ma Tei and Whampoa have been completed. The section of overhead lines

at Ho Man Tin Station has been energized and to be followed by train testing in the first quarter of 2016.



Overhead lines installation works underneath Tak On Street

7. For the railway tunnels between Ho Man Tin Station and Whampoa Station, the installation of overhead lines and trackside equipment is progressing as planned. The main control system, communication and signalling systems are advancing in full swing.

Ho Man Tin Station and Essential Public Infrastructure Works (EPIW)

- 8. Ho Man Tin Station will serve as the future interchange station between the Kwun Tong Line and the SCL. The 8-level deep station is in cruciform-shaped design with dedicated interchanging escalator connections, interchange concourse and entrance connections at various levels, providing convenient access and transfer service between KTE and the future SCL.
- 9. At Ho Man Tin Station, E&M system installation works including building services, communication, signalling and control systems are in full swing. Assembly of escalators and KTE platform screen doors has been completed while the architectural fit-out works continue. External drainage and utilities connection works are proceeding in the vicinity of Ho Man Tin Station and the reinstatement for the roads affected by construction works has also commenced.
- 10. Ho Man Tin Station has five entrances which are located at Yan Fung Street, Fat Kwong Street, Chatham Road North and Chung Hau Street respectively. Structural works for the entrances are substantially complete, and passenger lifts will also be provided at the entrances to connect the street level and station concourse.



Structure of the lift tower at Chung Hau Street is completed

11. Over 90% of the EPIW for Ho Man Tin Station has been completed. The walkway and footbridges connecting Oi Man Estate and Ho Man Tin Estate has been opened for public use since December 2015. For the public transport facilities at Chung Hau Street, the two sections of subway crossing Fat Kwong Street and Chung Hau Street and the section of footbridge connecting Chatham Road North and Ho Man Tin Station, they are expected to be opened for public use together with the opening of Ho Man Tin Station.



The lift facilities and footbridge connecting Oi Man Estate and Ho Man Tin Estate

Whampoa Station and tunnelling works

- 12. Whampoa Station, the future terminal station of Kwun Tong Line, comprises East and West Concourses with a single platform in between. Structural works at both Concourses are substantially completed and permanent power supply to the station was connected in December 2015. E&M, building services and equipment installation continue at both Concourses.
- 13. The entrance structure at Man Siu Street and Hung Hom Road has been completed and the external finishing will commence in January 2016. The integrated entrances at Shung King Street and Tak On Street connecting to shopping malls of Whampoa Garden are under construction. The structural works for the overrun tunnel at Wan Hoi Street have been completed.



E&M equipment installation at East Concourse of Whampoa Station

- 14. With the reinstatement of drainage and utilities at Shung King Street, one of the carriageways was re-opened to traffic from late November 2015. The construction of the integrated structure for lifts, ventilation shaft and emergency evacuation access is in progress and the structure is expected to be completed in the first quarter of 2016.
- 15. Following the substantial completion of the civil works of KTE project, the E&M works for Ho Man Tin Station and Whampoa Station are in full swing, paving way for the testing and commissioning phase for the railway system in the next stage. The construction team is pushing forward with the remaining works with a view to meeting the target to commence train service in the 3rd or 4th quarter of 2016.

Conclusion

16. Members are invited to note the above information.

MTR Corporation Limited February 2016