

**政府總部
運輸及房屋局
運輸科**

香港添馬添美道 2 號
政府總部東翼



**Transport and
Housing Bureau
Government Secretariat**

Transport Branch
East Wing, Central Government Offices,
2 Tim Mei Avenue,
Tamar, Hong Kong
電話 Tel. No.: 3509 8181
傳真 Fax No.: 2136 8017

本局檔號 OUR REF.: THB(T)L4/6/127
來函檔號 YOUR REF.:

By E-mail and Fax
(Fax No: 2978 7569)

[English Translation]

Legislative Council Secretariat
Legislative Council Complex
1 Legislative Council Road
Central, Hong Kong
(Attn: Ms Sharon CHUNG)

23 June 2017

Dear Ms Chung,

**Legislative Council Public Works Sub-Committee
Meeting on 21 June 2017**

461TH – Central Kowloon Route – Main Works

Supplementary Information

At the meeting of Public Works Sub-committee (PWSC) on 21 June 2017, Members requested the Government to provide supplementary information on the captioned Project. Our responses are as follows.

- (1) List out by individual items the costs for reprovisioning of public facilities affected by the proposed project**
2. The reprovisioning of affected public facilities described in paragraph 9(g) of the discussion paper no. PWSC(2017-2018)11 covers Yau Ma Tei (YMT) Public Library, Yau Ma Tei Jade Hawker Bazaar (YMTJHB), YMT Dermatology Clinic, YMT Methadone Clinic and YMT Maternal and Child Health Centre. The details were set out in Enclosure 3 of the discussion paper. A breakdown of the reprovisioning cost for the facilities is as follows:

Facilities to be reprovisioned	Estimated reprovisioning cost (in September 2016 prices)
Construction of a temporary building for temporary reprovisioning of the YMT Public Library and YMTJHB	Approx. \$170 million
Construction of a temporary building at Yau Cheung Road in YMT for temporary reprovisioning of the Maternal and Child Health Centre	Approx. \$110 million
Construction of a new building at the original site of the Yau Ma Tei Multi-storey Carpark (YMTMCP) for permanent reprovisioning of the YMT Public Library in future	Approx. \$130 million
Permanent reprovisioning of the YMTJHB ¹	Approx. \$60 million
Other demolition and reprovisioning works (e.g. the YMT Methadone Clinic, the YMT Dermatology Clinic, etc.)	Approx. \$180 million
Total:	Approx. \$650 million

3. On the other hand, the estimated cost for the furniture and equipment of the above facilities to be reprovisioned (except the YMTJHB) is approximately \$30 million, i.e. the furniture and equipment item mentioned in paragraph 9(j) of the discussion paper.

(2) Details of the ground investigation carried out by the Government for the proposed project

4. In the planning and design stage of the Central Kowloon Route (CKR) project (the Project), the Highways Department (HyD), following the guidelines stipulated in the GEOGUIDE published by the Geotechnical Engineering Office, made reference to the geological information from around 1 200 drillholes in the Geotechnical Information Unit² maintained by the Civil Engineering and

¹ The current estimated cost is a funding earmarked for the permanent reprovisioning of the YMTJHB in future. The Highways Department (HyD) will continue to liaise with the Food and Environmental Hygiene Department, Planning Department and the relevant stakeholders on permanent reprovisioning of the YMTJHB.

² The Geotechnical Information Unit forms part of the Civil Engineering Library (CEL) and houses a comprehensive collection of geotechnical data from ground investigations throughout the territory of Hong Kong. The CEL is the central reference library of the CEDD and is open to members of the public.

Development Department (CEDD) and the Building Records Access and Viewing On-line (BRAVO) system of the Buildings Department³. Subsequently, over 200 drillholes were bored by contractors commissioned by the Government to collect the necessary geological information. Moreover, the HyD will further bore around 40 vertical drillholes, and conduct horizontal directional corings with a total length of around 3.6 kilometres (km) along the alignment of the main tunnel. In comparison with the ground investigation using only vertical drillholes bored at certain intervals, horizontal directional coring retrieves rock cores continuously along the alignment of the main tunnel horizontally, thus enabling a better grasp of the variations in rock conditions along the alignment. The above ground investigation works can sufficiently cover the geological information required by the Project already. The concerned information will be made available at the tender stage for tenderers' reference, enabling the tenderers to have sufficient understanding on the variations in geological conditions along the alignment and the associated risks, so as to determine a reasonable tender price.

(3) Public Works Projects (PWPs) previously taken forward by the Government in the form of New Engineering Contract (NEC) and their details

5. As per Hon LEUNG Kwok-hung's request at the PWSC Meeting on 21 June, the Development Bureau provided in **Enclosure 1** the list of capital works projects adopting New Engineering Contract (NEC) form for reference.

(4) Reasons for increase in project cost

6. Regarding Members' enquiries on —

- (a) the reasons for the increase in the estimated cost of the proposed Project from around \$10 billion in 2002 to around \$42.4 billion (in money-of-the-day (MOD) prices) at present; and
- (b) the proposed project cost (excluding the provision for price adjustment) has increased due to the need to meet various new works requirements. In this connection, please list by item details of the new requirements and the additional funding involved.

At the meeting on 21 June 2017, the Director of Highways explained to Members the changes in the estimated cost of the Project and the reasons thereof with the aid of a PowerPoint slide (**Enclosure 2** refers), which are summarised in the table below.

³ The Buildings Department's BRAVO system enables the public to inspect private buildings records (including relevant geological information) via the Internet (<https://bravo.bd.gov.hk>).

Table 1: Changes in the Estimated Cost of the Project

	Estimated Cost (HK\$)
<p>(A) Rough estimation in December 2000 prices based on early conceptual proposal:</p> <p align="right">10 billion</p> <p>To update the estimate in 2000 to 2016 prices level, the construction cost has to be increased by:</p> <p align="right">(Note: Based on the information paper submitted by the Government to the Legislative Council (LegCo) Panel on Transport in June 2002)</p> <p align="right">5.1 billion</p> <p align="right">Total: 15.1 billion</p>	
<p>(B) Estimated construction cost in 2016 prices based on detailed design: (Note: The estimation in MOD prices is \$42.36 billion)</p> <p align="right">29.6 billion</p>	
Difference between (B) – (A):	14.5 billion

7. Similar to other major PWPs, the Government has to carry out a series of preparatory work in planning the Project, including site investigation, preliminary design, detailed design and relevant statutory procedures (including gazettal of the Project under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) and conducting environmental impact assessment (EIA) under the Environmental Impact Assessment Ordinance (EIAO) (Cap. 499)), etc. In June 2002, at the request of the LegCo Panel on Transport, the Government submitted supplementary information based on the conceptual proposal of the Project at that time to provide a rough estimation on the construction cost of the Project which was around \$10 billion (in December 2000 prices). This estimation did not include the provision for price adjustment.

8. There was a significant increase in construction prices between 2000 and 2016. In 2016, the HyD made reference to the market conditions and tender prices of similar infrastructure projects at that time, and estimated the cost of the Project based on the conceptual proposal to be \$15.1 billion in September 2016 prices. The detailed design of the Project has now been largely completed. According to the detailed design, the estimated cost of the Project is around \$29.6 billion in September 2016 prices (around \$42.3 billion in MOD prices). There is a difference of about \$14.5 billion when comparing with the estimation based on the preliminary design. This is mainly because in the course of further investigation and detailed planning and design (including conducting studies such as traffic impact assessment and EIA, and relevant statutory procedures), and after gathering

the public's views in the public engagement and consultation exercises, we have enhanced the design and added new facilities so as to meet the latest fire safety, environmental, building safety and technical requirements; included part of the roads of Trunk Road T2 in this Project; and strengthened the work of district beautification and heritage conservation to meet public demands.

9. The project cost has increased owing to the reasons mentioned above. Please refer to Table 2 below for details.

Table 2: Additional Costs Incurred from Detailed Design

Reasons	(HK\$)
<p>i. Enhancement of design and construction arrangement to safeguard the safety and redevelopment potential of buildings and structures along the alignment</p> <p>For example:</p> <ul style="list-style-type: none"> ● strengthening of the design of underground tunnel to avoid affecting the structural safety and redevelopment potential of buildings along the alignment; ● enhancement of technical requirements of works and strengthening of works supervision, etc. with reference to other recent tunnel projects 	Approx. 4.7 billion
<p>ii. Provision of additional facilities to meet the environmental protection requirements and enhance landscaping</p> <p>For example:</p> <ul style="list-style-type: none"> ● installation of air purification system and associated electrical and mechanical systems for the tunnel; ● enlargement of three ventilation buildings to provide adequate space for installing the air purification systems; ● provision of large-scale noise enclosures, landscaped decks, and construction of waterfront promenade, etc. 	Approx. 4.4 billion

Reasons	(HK\$)
<p>iii. Modification of the design and construction arrangement to enhance heritage protection</p> <p>For example:</p> <ul style="list-style-type: none"> ● to meet the public request for the preservation of the Yau Ma Tei Police Station (YMTPS), implementation of underpinning works for retaining the new wing and protection works for the old wing of the YMTPS to ensure that construction of the CKR would not affect the structure of the YMTPS, which has been accorded with a Grade 2 historic building status; ● safeguarding the structural integrity of the Kowloon City Ferry Piers, Passenger Pier (accorded with a Grade 2 historic building status in 2014) during the construction of the undersea tunnel, etc. 	Approx. 2.3 billion
<p>iv. Revision of the construction method of Kowloon Bay Section of the tunnel with temporary reclamation in response to the Zero Reclamation option of Kai Tak Development (KTD)</p> <ul style="list-style-type: none"> ● In response to the judgement of the Court of Final Appeal (CFA) in January 2004⁴, the Kai Tak Planning Review was commissioned in July 2004 with “no reclamation” as the starting point. To tally with the changes in the KTD, part of the CKR has to be built across the waters of Kowloon Bay. After considering all technical factors and the need to comply with the Protection of Harbour Ordinance (Cap. 531) (including the judgment in January 2004), the construction method of the Kowloon Bay Section of the tunnel has been revised to adopt temporary reclamation. 	Approx. 2.1 billion

⁴ The CFA clarified that the presumption against reclamation in section 3 of the Protection of Harbour Ordinance (Cap. 531) can only be rebutted if a single test that is “the overriding public need test” could be satisfied. Public needs are community needs and include the economic, environmental and social needs of the community. A need should only be regarded as overriding if it is a compelling and present need and there is no reasonable alternative to reclamation.

Reasons	(HK\$)
<p>v. Provision of additional facilities to meet the fire safety requirement</p> <p>For example:</p> <ul style="list-style-type: none"> ● additional provision of around 1 400 automatic opening ventilators and the associated sensor system for the new YMT landscaped deck and proposed noise enclosures over the Gascoigne Road Flyover (GRF); ● additional provision of partition walls, drenching system, two fire service lifts and escape staircases, etc. for the tunnel section under the new YMT landscaped deck. 	Approx. 0.6 billion
<p>vi. Inclusion of part of the roads of Trunk Road T2 in this Project to ensure that the CKR can operate independently before the commissioning of Trunk Road T2</p>	Approx. 0.4 billion
Total:	Approx. 14.5 billion

10. The HyD will implement suitable cost control measures including packaging the Project into several contracts for implementation with a view to enhancing tender competitiveness and minimising non-essential design and contractual requirements.

11. The construction costs of different tunnels cannot be directly compared because of their differences in construction methods, geological condition, geographical constraints and traffic and environmental mitigation requirements. Regarding the Project, the tunnel has to pass through several fault zones. In addition, its alignment is close to residential dwellings and a number of important facilities, including the existing service reservoirs, Kwun Tong Line and Tsuen Wan Line of the MTR Corporation Limited, the Shatin to Central Link under construction, and existing buildings, etc. Apart from to avoid affecting these residential dwellings and important facilities, we have to overcome the constraints imposed by them on the works. As a result, some sections of the tunnel will have to be constructed by more expensive methods (non-blasting method or cut-and-cover method using temporary reclamation).

12. The Project involves works in the urban area which is densely populated with limited land resources. It also involves temporary reclamation, protection works for the existing facilities and reprovisioning of certain facilities. At the

same time, it needs to protect the environment and enhance the landscaping. All these works will increase the project cost. The Project and the Central-Wan Chai Bypass and Island Eastern Corridor Link (CWB) under construction are similar in nature. Both are recent mega scale infrastructure projects and have to be constructed in the densely populated urban area. The tunnel sections of both projects are about 80% of their total lengths. The cost per km of dual one-lane road is around \$2.6 billion (in September 2016 prices) for the CWB, while that for the Project is around \$2.1 billion (in September 2016 prices). The unit costs of both projects are thus on par.

(5) Details of the design of the three ventilation buildings under the proposed Project (including the height and configuration of each building)

13. The CKR tunnel is approximately 3.9km long and the design of its ventilation system comprises three ventilation buildings, i.e. the YMT Ventilation Building in the west, Ho Man Tin (HMT) Ventilation Building in the middle and Kai Tak (KT) Ventilation Building in the east.

14. The YMT Ventilation Building is located at the YMT Interchange of the West Kowloon Reclamation area with a building height of around 17 metres (m). The HMT Ventilation Building is located next to Ho Man Tin Fresh Water Service Reservoir at the peak of HMT with a building height of around 6 m. The KT Ventilation Building is next to the Kai Tak Tunnel Building of the KTD with a building height of around 16 m.

15. The design of the three ventilation buildings complies with the requirements set out in the Environmental Permit (EP), including the installation of advanced air purification system in the ventilation buildings which can effectively filter over 80% of the nitrogen dioxide and respirable suspended particulates from the exhaust of the vehicles to help reduce pollutants in the air, thus meeting the air quality requirement set out in the EP. The exhaust vent of the YMT Ventilation Building will be designed to discharge the filtered exhaust at an inclined 45-degree direction towards the sea while that of the HMT and KT Ventilation Buildings will discharge the filtered exhaust vertically upward.

16. The EIA study on the CKR has already considered the existing developments and those under planning nearby. The result of the EIA complies with the EIAO, including the air quality requirement.

(6) Supplementary information on the Compromise Scheme

17. Regarding the about 145m-long carriageways of the GRF fronting Blocks 1 and 5 of Prosperous Garden (PG), the Government proposes in the Compromise

Scheme to convert a section of the semi-enclosure of around 100 m long to a noise enclosure covering carriageways of both bounds while having vertical opening on the side fronting Yan Cheung Road farther away from the PG. Members have asked —

- (a) for the details of the design of the aforementioned vertical opening;
- (b) about the differences between the Compromise Scheme and the Government's former proposal (i.e. covering the whole section of the 145m-long carriageway with semi-enclosure) in respect of noise mitigation and air quality improvement; and
- (c) how the Government or the specialists concerned reached the conclusion that air quality of the air sensitive receivers of PG would not be worsened by the Compromise Scheme.

18. Based on the present preliminary conceptual design of the central noise enclosure under the Compromise Scheme, the vertical opening of the 100m-long enclosure covering the carriageways of both bounds is around 5m tall. The HyD will further assess and confirm the height of the opening at the detailed design stage.

19. According to the assessment on the noise mitigation effect, the central noise enclosure proposed in the Compromise Scheme can further reduce the noise level of three units, where traffic noise level will already be reduced to not more than 70dB(A) after implementation of the mitigation measures in the EIA report, by an additional 1.0dB(A). In other words, the noise reduction effect is similar to that of the Central Full Enclosure as requested by the PG's residents. In the scenario with no noise enclosure, pollutants generated by vehicles along the roads will disperse to both sides of the roads, which will be closer to Block 1 of the PG. On the other hand, after installing the noise enclosure stipulated in the EP, pollutants will disperse through the opening in the southwest direction around 40 m from the PG, which is farther away from PG when comparing with the scenario with no noise enclosure. Under the Compromise Scheme, the opening of the central noise enclosure will move further to the southwest direction, increasing the distance between the opening and the PG to about 55 m. It is therefore believed that the effect on air quality will be similar to the case with the noise enclosure stipulated in the EP. We have consulted Professor Alexis Lau of the Institute for the Environment of the Hong Kong University of Science and Technology on the Compromise Scheme. Professor Lau opined that comparing with the proposal to be implemented under the EIA report, the air quality of the PG would not be worsened by the Compromise Scheme as the carriageways of the whole section of GRF fronting the PG will be covered by the proposed central noise enclosure and the location of its vertical opening will move further away from the PG in the southwest direction under the Scheme.

(7) Further supplementary information on the Compromise Scheme

20. Regarding the proposal of extending the full noise enclosure northward by 40 m fronting Blocks 3 and 4 of the PG, Members have asked for the reason why there is no room for further extending the full enclosure to a total length of 230 m or below.

21. The Compromise Scheme we put forward now is a proposal we recommend after considering the requests of the residents and various factors, and confirming that the project is preliminarily technically feasible. To revise the Compromise Scheme according to Members' suggestion, the carriageways covered by the extended noise enclosure will resemble a road tunnel to a greater extent. The HyD will need additional time to conduct more detailed study including computer modelling to confirm the technical feasibility of such proposal. Therefore, we cannot confirm at this stage whether the revision proposed by Members is technically feasible or not. Nevertheless, we will conduct relevant detailed feasibility study, investigation and detailed design, and consult the public and stakeholders when taking forward any public works projects (including this Compromise Scheme).

(8) Estimation of the economic benefit and the increase in cost owing to the delay in implementation of the Project

22. Upon commissioning of the CKR, it is estimated that the journey time between the YMT and Kowloon Bay during peak hours would take around 5 minutes, saving about 25 minutes in comparison with the journey time without the CKR. The economic benefit of about \$3 billion per year arises from the saving in journey time by the passengers upon commissioning of the CKR. Regarding the calculation method, the value of time savings is computed by multiplying the time saved by passengers using different transport modes by the corresponding value of time. The value of time indicates how much money a passenger is willing to pay in return for time saving. As the CKR provides an express bypass linking east and west Kowloon, the journey time between east and west Kowloon can be saved. It is estimated that the journey time saved will be about 120 000 passenger hours per day by 2030. By adopting \$70 as the hourly value of time as the basis of calculation, the economic benefit brought in 2016 prices level is around HK\$3 billion per year.

23. It is estimated that delay in the implementation of the Project by one year will correspondingly increase the project cost by about \$2 billion due to deferral of cash flow by one year. As mentioned in paragraphs 20 and 21 of the discussion paper no. PWSC(2017-2018)11, we have used the Government's latest set of assumptions on the trend rate of change in the prices of public sector building and construction output and the corresponding price adjustment factor (PAF) to convert

the cash flow of project cost estimated at the constant prices level into MOD prices level. As stated in paragraph 20, the prevailing PAF forecasted is around 5% on average annually. By adopting this factor as the basis of calculation, if the implementation of the Project is delayed by one year, the additional project cost thus incurred will be around \$2 billion (i.e. \$42.39 billion multiplied by 5% per annum (the forecasted PAF) equals around \$2 billion).

(9) Whether the full noise enclosure proposed under the Compromise Scheme can cover the GRF/road fronting the classrooms of Yaumati Catholic Primary School (YMTCPs)

24. Under the Compromise Scheme, extending the full enclosure northward by 40 m can benefit about 50 additional dwellings of the PG facing the GRF by reducing the noise level by 1.0 dB(A) or above. Although extending the full noise enclosure northward by 40 m cannot fully cover the GRF fronting the YMTCPs, the noise level at the classrooms of YMTCPs has already been reduced to an acceptable level (i.e. not exceeding 65 dB(A)) through the provision of acoustic window insulation and air conditioning facilities under the School Insulation Programme of the Education Bureau.

Yours sincerely,

(Jocelyn NG)
for Secretary for Transport and Housing

c.c.

Secretary for Financial Services and the Treasury
(Attn: Ms Margaret HSIA)

Fax No: 2523 5722

Secretary for Development
(Attn: Mr John KWONG)

Fax No: 2537 1961

Director of Highways
(Attn: Mr Tony LOK)

Fax No: 2714 5198

Commissioner for Transport
(Attn: Mr K F CHEUNG)

Fax No: 2186 7519

Capital Works Projects Adopting New Engineering Contract (NEC) Form

	Contract Title	Year of Commencement
1.	Construction of a 30-Classroom Secondary School at Site 1A-2, Kai Tak Development	2017
2.	Signature Project Scheme Sai Kung District - Reconstruction of the Sharp Island Pier	2017
3.	Development of Anderson Road Quarry Site - Pedestrian Connectivity Facilities Works Phase 1	2017
4.	Provision of Electrical and Mechanical Equipment for Kau To Sewage Pumping Station	2017
5.	Provision of High Voltage Electrical Equipment for Stage III of Sha Tin Sewage Treatment Works	2017
6.	Provision of Barrier-free Access Facilities for Highways Structures – Phase 3 Contract 8	2017
7.	Lift and Pedestrian Walkway System at Cheung Hang Estate, Tsing Yi	2017
8.	Improvement of Water Supply to Sheung Shui and Fanling	2017
9.	Uprating of Chai Wan Salt Water Supply System - Mainlaying and Upgrading of Siu Sai Wan Salt Water Pumping Station	2017
10.	Signature Project Scheme in Sha Tin - Decking of Tai Wai Nullah in Sha Tin and Revitalisation of Shing Mun River Promenade near Sha Tin Town Centre	2016
11.	Cycle Tracks from Tuen Mun to Sheung Shui - Remaining Works	2016

	Contract Title	Year of Commencement
12.	Provision of Universal Access Facilities for Highway Structures - Package 1 Contract 3	2016
13.	Road and Infrastructure Works for Development at Lin Cheung Road, Sham Shui Po	2016
14.	Improvement works at Mui Wo, Phase 2 Stage 1	2016
15.	Improvement Works at Tai O - Phase 2 Stage 1	2016
16.	West Kowloon Reclamation - mainworks (remainder) - footbridge at junction of Sham Mong Road and Tonkin Street West in Sham Shui Po	2016
17.	Tseung Kwan O-Lam Tin Tunnel – Road P2 and associated works	2016
18.	Demolition and ground decontamination works for development at North West Kowloon Reclamation Site 1, Sham Shui Po - Phase 1	2016
19.	Tseung Kwan O-Lam Tin Tunnel - Northern Footbridge	2016
20.	Widening of the Footbridge connecting Pak Wo Road to MTR Fanling Station and its Associated Works	2016
21.	Tung Chung New Town Extension – Site Investigation Works Stage 1	2016
22.	Queen's Hill Development - Road and Drainage Works	2016
23.	Queen's Hill Development - Sewage Pumping Station Works	2016
24.	Kai Tak Development - Stage 3B Infrastructure at Former North Apron Area	2016

	Contract Title	Year of Commencement
25.	Improvement Works of Rotating Biological Contactors (RBC) in Ma Wan Sewage Treatment Works	2016
26.	Construction of an Additional Sewage Rising Main between Tung Chung and Siu Ho Wan and Associated Works	2016
27.	Improvement Works Gasholder No.3 at Shatin Sewage Treatment Works	2016
28.	Provision of Electrical and Mechanical Facilities for O Tsai Sewage Pumping Station and Enhancement Works of Electrical and Mechanical Facilities for Yung Shue Wan Sewage Treatment Works and Sok Kwu Wan Sewage Treatment Works	2016
29.	Provision of Electrical and Mechanical Equipment for Detritor Nos. 1 and 2 of To Kwa Wan Preliminary Treatment Works	2016
30.	Minor Drainage Improvement Works in Northern Hong Kong Island and North District	2016
31.	Provision of Universal Access Facilities for Highway Structures - Package 1 Contract 2	2015
32.	Provision of Universal Access Facilities for Highway Structures - Package 2 Contract 2	2015
33.	Site Formation and Infrastructural Works near Tong Hang Road and Tsz Tin Road in Area 54, Tuen Mun	2015
34.	Provision of Electrical and Mechanical Facilities for Eight Sewage Pumping Stations in the North and Tai Po Districts, N.T.	2015
35.	Upgrading of High Voltage Switchgears and Motor Starters in Cheung Sha Wan Sewage Pumping Station	2015

	Contract Title	Year of Commencement
36.	Provision of Electrical and Mechanical Facilities for Shek Wu Hui Sewage Treatment Works - Further Expansion Phase 1A - Advance Works and Ng Chow South Road Sewage Pumping Station	2015
37.	Retrofitting of Noise Barriers on Tuen Mun Road - Town Centre Section	2015
38.	Improvement works at Mui Wo, phase 1	2014
39.	Provision of Electrical and Mechanical Facilities for Tin Liu Ha Sewage Pumping Station and Tong Min Tsuen Sewage Pumping Station	2014
40.	Improvement of Fresh Water Supply to Cheung Chau	2013
41.	Design and Construction of Tin Shui Wai Hospital	2013
42.	Pak Hok Lam Trunk Sewer and Sha Tau Kok Village Sewerage	2012
43.	Happy Valley Underground Stormwater Storage Scheme	2012
44.	Yuen Long and Kam Tin Sewerage, stage 3 package 2	2012
45.	Improvement to Pok Oi Interchange	2012
46.	Retrofitting of Noise Barriers on Tai Po Tai Wo Road near Po Nga Court	2012
47.	Lam Tsuen Valley Sewerage - Village Sewerage, Stage 2, Phase 1	2012
48.	Sewerage at Yuen Long Kau Hui and Shap Pat Heung	2012
49.	Retrofitting of Noise Barriers on Fanling Highway (MTR Fanling Station to Wo Hing Road)	2010

	Contract Title	Year of Commencement
50.	Improvement of Fuk Man Road Nullah in Sai Kung	2008

造價因價格調整及新增要求上升

約100 億元

2002年估算
(以2000年12月價格計算)
按項目早期的概念性方案
作出粗略估算

2000年至2016年工程價格上升

約151 億元

(以2016年9月價格計算)

2017年估算

- 優化設計及施工安排以保障沿線樓宇及構建物安全及重建潛力(如：加強地下隧道壁設計及臨時支撐)(約47億元)
- 新增設施以符合環境保護要求及提升景觀美化(如：隔音屏障、隔音罩、綠化平台及為隧道加裝空氣淨化系統等)(約44億元)
- 優化設計及施工安排以提升古蹟保護(如：油麻地警署基礎托換工程)(約23億元)
- 因應啟德零填海方案，九龍灣段隧道改為以臨時填海方式建造(約21億元)
- 新增設施以符合消防要求(如：隔音罩加裝自動開啟消防氣窗)(約6億元)
- 將部份T2主幹路工程內的道路納入工程計劃內(約4億元)

相差約 145 億元

(以2016年9月價格計算)

296億3千6百10萬元

(按付款當日價格計算為
423億6千3百90萬元)