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Urgent by fax
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17 November 2015

Ms Sophie LAU
Clerk to Select Committee
Legislative Council Secretariat
Legislative Council Complex
1 Legislative Council Road
Central, Hong Kong

Dear Ms Lau,

**Select Committee to Inquire into the Background of and
Reasons for the Delay of the Construction of
the Hong Kong section of the Guangzhou-Shenzhen-Hong Kong
Express Rail Link (“Select Committee”)**

Request for further information

Thank you for your letter dated 20 October 2015 on the captioned subject.

Regarding the information requested, I would like to reply as follows:-

Details of the design changes in respect of different contracts under the Hong Kong section of Guangzhou-Shenzhen-Hong Kong Express Rail Link project up to April 2014 and the additional costs involved.

As you are aware, the MTR Corporation Limited (“MTRCL”) is entrusted with the design, construction, testing and commissioning of the Hong Kong section of Guangzhou-Shenzhen-Hong Kong Express Rail Link (“XRL”) project and is responsible for the overall management of the project. Under this arrangement, MTRCL would have the first-hand information concerning any matters relating to the XRL project, such as the details of design changes and the additional costs involved. As such, we have enquired with MTRCL in this



matter and were given to understand that the following, but not limited to, situations would have led to design changes:

- Unforeseen ground conditions
- Change in construction sequences/methods
- Requests by third parties necessitating changes

As for the details of the design changes and the additional costs involved in respect of different contracts under the XRL project, MTRCL expressed that the requested information is confidential in nature and the disclosure of which may prejudice MTRCL's position in the negotiation with their contractors in settlement of any claims arising from the design changes.

However, with a view to facilitating the work of the Select Committee, we offer to provide some examples of the design changes in respect of different contracts under the XRL project (at Annex) based on the information from the "Second Report by the MTRCL's Independent Board Committee on the Express Rail Link Project" for Member's reference.

Yours sincerely,



(Henry Chan)

Principal Government Engineer/Railway Development
Railway Development Office
Highways Department

Encl.

cc Secretary for Transport and Housing
(Attn: Miss Winnie Wong)

Examples of Design Changes under the XRL project

<i>Contract</i>	<i>Examples</i>
810A	<ul style="list-style-type: none"> ● Changes to construction method ● Changes to temporary structures ● Improving works area (e.g. ramps) ● Re-sequencing (e.g. erection before diaphragm action) ● Noise mitigation to extend working hours
810B	<ul style="list-style-type: none"> ● Change in construction methods (e.g. shear keys) ● Improvement to works access (e.g. ramps) ● Spoil disposal ● Re-sequencing (slab construction, Austin Road West Underpass)
811A	<ul style="list-style-type: none"> ● Extension of work hours ● Additional D-wall ● Changes to methods (bituthene board), ● Design (e.g. base slab area) and layout of construction site
811B	<ul style="list-style-type: none"> ● Construction method (e.g. top down instead of bottom up for Lin Cheung Rd, pre-splitting, breakwater removal) ● Layout of works area (e.g. temporary traffic flow of Jordon Rd, temporary footbridge, Lin Cheung Rd flips) ● Re-sequencing (P-way access) ● Extended working hours (E&M) ● Additional resources (D-Wall plant)
820	<ul style="list-style-type: none"> ● TBM modifications ● Re-sequencing of TBM drives and tunnel box construction ● Adding 3rd shift

822	<ul style="list-style-type: none"> ● Enlargement of Ventilation Adit ● Additional shutters
823A	<ul style="list-style-type: none"> ● Second TBM ● Overtime working ● Re-sequencing various works ● Change to tunnel box design
824	<ul style="list-style-type: none"> ● Changes to design (height of piles, block walls) ● Relocation of the dismantling area for the TBMs into the tunnel to allow build-out of shaft
825	<ul style="list-style-type: none"> ● Use of one additional TBM and conveyor belt system (including work gangs, trains, spoil pit) ● Relocation of cross passages to more favourable ground ● Increase openings to improve access points for track-laying contractors
826	<ul style="list-style-type: none"> ● Changes in design (e.g. shortening of section, adding 'Stage 2B' for dismantling TBM) ● Re-sequencing (e.g. buffer zone and concurrent cross passage way construction, concurrent construction of invert and walkways) ● Change in construction method (jet grouting instead of bulkhead)

Note:

1. The above examples are extracted from MTRCL's "Second Report by the Independent Board Committee on the Express Rail Link Project".

Abbreviation:

1. D-wall = Diaphragm wall
2. P-way = Permanent way
3. E&M = Electrical and mechanical
4. TBM = Tunnel Boring Machine