

AVA Register for Government Projects
Project Description

Return From (Department/bureau/authority) Planning Department

Return For 3rd Quarter of 2015

<p>1. Project Name (in English & Chinese)</p>	<p>Term Consultancy for AVA Services by Computational Fluid Dynamics – Container Terminals No.1-9</p> <p>合約顧問服務 – 一號至九號貨櫃碼頭空氣流通評估 (採用「計算機流體動力學」方法進行)</p>
<p>2. Project Reference</p>	<p>AVR/G/97</p>
<p>3. Outline of Project Details <i>(attach location plan)</i></p> <p><i>Please include key development parameters e.g. site area, total GFA, building height, lot frontage for waterfront sites etc. relevant to the project and the relevant criteria for AVA set out in para. 4.</i></p>	<p>The air ventilation assessment via Computational Fluid Dynamics aims to carry out a quantitative assessment on the likely air ventilation impact under five building height restriction (BHR) scenarios for the Kwai Tsing container port at Container Terminal Nos.1-9 (CT1-9):</p> <p>Baseline Scenario: Existing condition encompassing three warehouses/ logistics centres with BH of 60-109mPD, and the vast expanse of open yard for container storage/ handling dotted with some low-rise buildings/ structures in the midst.</p> <p>Scenario A: Maximum BH of 110mPD for proposed warehouses and 70mPD for proposed container hanger system, five 40m-wide non-building areas (NBAs) in various CTs and a 50m-wide strip of land of 25mPD along the full length of the quay edge.</p> <p>Scenario B: Same as Scenario A, except maximum BH of</p>

180-250mPD for proposed warehouses instead of 110mPD.

Scenario C:

Same as Scenario A, except some areas of concern being lowered to 30mPD from 110mPD/70mPD and the width of five NBAs being widened to 60m from 40m.

Revised Scenario C:

Same as Scenario C, except the 30mPD being relaxed up to 110mPD/30mPD at CT4 Crosswharf, up to 70mPD at other areas of concern and the width of five NBAs being narrowed up to 40m from 60m.

Revised Scenario C (Modified):

Same as Revised Scenario C, except height variation at CT4 Crosswharf being lowered to 70mPD/NBA/30mPD and one NBA being relocated.

4. Select the following category(ries) which would be applicable to the major government project :

(Please tick ALL relevant categories)

- Planning studies for new development areas.
- Comprehensive land use restructuring schemes, including schemes that involve agglomeration of sites together with closure and building over of existing streets.
- Area-wide building height control reviews.
- Developments on sites over 2 hectares and with an overall plot ratio of 5 or above.
- Development proposals with total Gross Floor Area exceeding 100,000 square metres.
- Developments with podium coverage extending over one hectare.
- Developments above public transport terminus.
- Buildings with height exceeding 15 metres within a public open space or breezeway designated on layout plans / outline development plans / outline zoning plans or proposed by planning studies.
- Developments on waterfront sites with lot frontage exceeding 100 metres in length.
- Extensive elevated structures of at least 3.5 metres wide, which abut or partially cover a pedestrian corridor along the entire length of a street block that has / allows development at plot ratio 5 or above on both sides; or which covers 30% of a public open space.
- Others, please specify

5. Relevant factors which have been taken into account in assessing the need for AVA			
<i>Factors</i>	<i>Y</i>	<i>N</i>	<i>Brief remarks</i>
Are there existing / planned outdoor sensitive receivers located in the vicinity of the project site falling within the assessment area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Outdoor sensitive receivers (mainly existing and planned open spaces) in Kwai Chung and Tsing Yi adjoining the project area.
Are there known or reasonable assumptions of the development parameters available at the time to conduct the AVA?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Various building height (BH) scenarios are formulated for AVA purpose, based on the best available information including operational requirement of Container Terminal and possible visual considerations.
Are alternative designs or alternative locations feasible if the AVA to be conducted reveals major problem areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Mitigation measures (e.g. lowered BH, non-building areas, etc.) are factored in the BH review to help solve the identified problem areas.
Are there other overriding factors that would prevail over air ventilation considerations in the determination of the project design?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Due regard should be given to operational requirement of Container Terminals.
Will the desirable project design for better air ventilation compromise other important objectives for the benefits of the public?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

5. Relevant factors which have been taken into account in assessing the need for AVA			
<i>Factors</i>	<i>Y</i>	<i>N</i>	<i>Brief remarks</i>
Has the public raised concern on air ventilation in the neighbourhood area of the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is the project already in advanced stage to incorporate AVA?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Further quantitative AVA(s) will also be required, where appropriate, to identify other enhancement measures and to ascertain their effectiveness.
Any other factors not listed above? (please specify)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6. Is AVA required?			
<input checked="" type="checkbox"/> AVA is required for the project	<i>Go to Section 7</i>		
<input type="checkbox"/> AVA should be conducted later	<i>Go to Section 8</i>		
<input type="checkbox"/> AVA to be waived	<i>Go to Section 9</i>		
7. AVA is required for the project <input type="checkbox"/> <i>not applicable</i> <i>(The AVA report, 3 hard copies and an electronic copy in Acrobat format, is to be submitted for record after completion)</i>			
(a) AVA Consultants (if any)	AECOM Asia Company Limited		
(b) Time (start / finish)	February 2013 / March 2015		
(c) Assessment tool used (CFD or/and wind tunnel)	CFD		
(d) Any design changes made to the project resulting from the AVA?	Major design changes: (i) Impose lower building height bands (ii) Impose Non-building Areas		

(e) Any major problems encountered in the AVA process?	NIL
(f) Any suggested improvement to the AVA process?	NIL
8. AVA should be conducted later	<input checked="" type="checkbox"/> <i>not applicable</i>
(a) What is the current stage of the project?	
(b) When should AVA be conducted?	
(c) Which Policy Bureau agrees to conduct AVA later?	DB THB Others _____
9. AVA to be waived	<input checked="" type="checkbox"/> <i>not applicable</i>
(a) Give justifications for waiving the requirement	
(b) Have qualitative design guidelines / measures been adopted and design changes been made to improve air ventilation of the project?	
(c) Which Policy Bureau agrees to waive AVA?	<input type="checkbox"/> DB <input type="checkbox"/> THB <input type="checkbox"/> Others _____
10. Contact	
(a) Name	██████████
(b) Designation	██████████
(c) Tel.	██████████
(d) E-mail	██████████