GBCSA ASAQS COST OF GREEN GUIDE TO QS

REV 1, OCTOBER 2016

GUIDELINE FOR COMPLETION OF PRO-FORMA ELEMENTAL ESTIMATING SUMMARY

This document provides guidelines for the completion of the "Excel" based Pro-forma "Design" Elemental Estimating summary for the specified project forwarded to you. Kindly print a full colour hard copy of this document and keep alongside as reference for your step-by-step completion of the electronic version of the Estimating summary.

<u>Please take note of the following structural details of the Pro-forma Excel document:</u>

- 1. The document has been protected for the sake of the integrity of the data and to ensure comparable feedback from the different participating quantity surveyors;
- 2. All cells of the Excel document that do not require any action from you have been locked and Filled in Green
- 3. All the cells where you have to provide information are unlocked and without any Fill colour [;_________;
- 4. The different columns and rows of the Pro-forma Excel document are numbered – Columns: from A – T and Rows: from 1 – 72 to enable referencing and identification of every aspect of the document, also if the document is only available in hard copy. This numbering differs from the Excel cell numbering (e.g. the 'Total Cost' of 'Substructure' under 'Primary Elements' will be referred to as 'C3', but the Excel cell reference is E12).

Purpose of the Elemental Estimating document

- 1. To detail the cost of Green Star certified office buildings according to the *"Guide to Elemental Cost Estimating 2013"* of the ASAQS;
- 2. To indicate the extent of the total budget spent on Green Building elements of Green Star certified buildings;
- 3. To indicate the level of penetration of Green Building design principals into the various elements of Green Star certified office buildings;
- 4. To indicate the estimated building cost of the same office buildings, but with conventional (non-green) building design principals;
- 5. To calculate the estimated Green Building Cost Premium;
- 6. To indicate the allocation of the estimated Green Building Cost Premium to the nine Categories of the *"Office v1 Tool"* of the GBCSA.

Layout of document

- 1. Project detail at the top/header of the document
- 2. Column A ASAQS Elemental Cost estimating codes
- 3. Column B ASAQS estimating elements descriptions
- 4. Column C 'Total Cost' of the project (to be completed by Participants)

- 5. Column D Cost of Green Building elements (included in Column C) (to be completed by Participants)
- 6. Column E Cost of Conventional construction (to be completed by Participants)
- 7. Column F Green Building Cost Premium
- 8. Columns G to O Allocation of Green Building Premium to "Office v1 Tool" Categories (to be completed by Participants)

COMPLETION OF THE DOCUMENT

 For office buildings with a "Design" Green Star rating the <u>final pre-tender budget</u> amounts should be reflected in column C

Column A & B - no action required

Column C

2. 'C1-58' - Allocate the various elements of the Total Cost of the project to column C according to the structure provided in columns A & B

All costs included are to be net of the following items which are to be indicated separately:

- 1.1 Preliminaries (see 'C59&60')
- 1.2 Contingency allowance (see 'C62')
- 1.3 Escalation allowances (see C64-C66')
- 1.4 Fees (see 'C67-C69')
- 1.5 Tax (see 'C71')
- 3. The cost reflected in column C should be <u>inclusive of all cost</u> that may have been reflected separately in the project reports prepared for your client, such as the different Sections, Phases, Basements, etc. of the building
- 4. Preliminaries (see 'C59') reflect the normal (%) allowance in the project estimate on the value of the work. Complete by entering the % allowance in 'Q59'
- 5. Any additional Preliminary amount allowed <u>for additional requirements</u> expected from the main contractor such as monitoring and reporting on Waste management, Procurement, etc is to be entered in 'R60'
- Contingency allowance (see 'C62') include as per <u>final pre-tender budget</u> by entering the % allowance in 'Q62'
- Escalation allowance (see 'C64-66') include as per <u>final pre-tender budget</u>. For Pre-Contract escalation enter the escalation % and period in 'Q64' and 'R64. For Contract escalation enter escalation %, the period, the cash flow factor and the JBCC factor in 'Q65 to T65'. If the JBCC escalation formula was not used, enter '1.0' in 'T65'
- Professional Fees (see 'C67') include as per <u>final pre-tender budget</u> by entering the total fee package % in 'Q67'
- Green Building consultant fees (see 'C68') include as per <u>final pre-tender budget</u> by entering the Green Building consultant fees % in 'Q68'
- 10. GBCSA submission fee (see 'C69') include as per final pre-tender budget by entering the GBCSA submission fee in 'R69'

- 11. Tax (see 'C71') include as per final pre-tender budget
- 12. The Total Estimated Escalated Construction Cost (incl Tax) is reflected by 'C72'

Column D

- 13. The principals of Items 3 & 4 described above for column C, also apply for column D
- 14. Primary Elements (see 'D2-18') identify every element of the building where Green Building design principals were included and add the <u>total</u> value of such work (e.g. if the reinforced concrete is to make use of 95% recycled steel for reinforcing bars, include the full cost of concrete, formwork and steel reinforcing)
- 15. Specialist Installations (see 'D19-32') identify every item where Green Building design principals were included and add the *total* value of such work
- 16. External Works (see "D36-57') identify every item where Green Building design principals were included and add the *total* value of such work
- 17. Preliminaries (see 'D59') include the same (%) allowance as was entered for 'C59' above
- 18. <u>The full value</u> of any additional Preliminary amount allowed in 'C60' will be included for 'D60'
- 19. Contingency allowance (see 'D62') include on a pro-rata basis as for 'C62'
- 20. Escalation allowance (see 'D64-66') include on a pro-rata basis as for 'C64-66'
- 21. Professional Fees (see 'D67') include on a pro-rata basis as for 'C67'
- 22. Green Building Consultant Fees (see 'D68') include <u>the full value</u> of the allowance for 'C68'
- 23. GBCSA submission fee (see 'D69') include the full value of the allowance for 'C69'
- 24. Tax (see 'D71') included on a pro-rata basis as for 'C71'
- 25. The Total Estimated Escalated Construction Cost (incl Tax) of work that includes Green Building design principals is reflected by 'D72'

<u>Column E</u>

- 26. The principals of Items 3 & 4 described above for column C, also apply for column E
- 27. Primary Elements (see 'E2-18') next to every item identified and added in column D ('D2-18') reflect the estimated cost of the same item/s, but valued as if conventional (non-green) building design principals were applied
- 28. Specialist Installations (see 'E19-32') next to every item identified and added in column D ('D19-32') reflect the estimated cost of the same item/s, but valued as if conventional (non-green) building design principals were applied
- 29. External Works (see "E36-57') next to every item identified and added in column D ('D36-57') reflect the estimated cost of the same item/s, but valued as if conventional (non-green) building design principals were applied
- 30. Preliminaries (see 'E59') will only <u>include the normal (%) allowance</u> on the estimated value of the work reflected in 'E59'
- 31. Additional Preliminary amount allowed in 'C60'- no action required as a <u>Nil</u> value will be added
- 32. Contingency allowance (see 'E62') include on a pro-rata basis as included for 'C62'
- 33. Escalation allowance (see 'E64-66') include on a pro-rata basis as included for 'C64-66'
- 34. Professional Fees (see 'E67') include on a pro-rata basis as included for 'C67'
- 35. Green Building Consultant Fees (see 'E68) reflect Nil value
- 36. GBCSA submission fee (see 'E69') reflect Nil value
- 37. Tax (see 'E71') include on a pro-rata basis as included for 'C71'

38. The Total Estimated Escalated Construction Cost (incl Tax) of work that includes Green Building design principals but valued as if conventional (non-green) building design principals were applied, is reflected by 'E72'

Column F

- 39. Column F (see 'F1-72') reflects the value of the estimated Green Building Cost premium. The Cost premium is calculated by subtracting each amount reflected in column E from the corresponding amount reflected in column D (e.g. F3 = D3 – E3)
- 40. The Total estimated Green Building Cost Premium (incl Tax) is reflected by 'F72'

Column G

- 41. Column G (see 'G1-72') reflects that portion of the estimated Green Building Cost Premium (see 'F1-72') that was incurred to obtain specific credits under the *"Management"* category of the *"Office v1"* tool of the GBCSA and should therefore be allocated to this category
- 42. For each element in column D (see 'D1-72') that reflects a value for work that included Green Building design principals, consider if "*Management*" category green building credits were targeted by that part of green building design and then add the applicable *pro-rata portion* of the value of such work to the "*Management*" category against that element
- 43. Any additional Preliminary amount allowed in 'C60' *for additional requirements* expected from the main contractor such as monitoring and reporting on Waste management, Procurement, etc will be reflected in 'F60'. The pro-rata portion of that amount that relates to the "*Management*" category should be entered in 'G60'
- 44. The portion of the estimated Green Building Cost Premium (incl Tax) allocated to the *"Management"* category of the *"Office v1"* tool of the GBCSA is reflected by 'G73'

Columns H-O

- 45. Columns H-O represent the other eight categories ("*Indoor environment Quality*" to "*Innovation*") of the "*Office v1*" tool of the GBCSA. Each respective column should be completed as described for column G "*Management*" above
- 46. The total amount of the estimated Green Building Cost premium reflected in column F for each respective element must be allocated to the applicable categories represented by columns G-O. The sum of the amounts of every single row of the table across the nine categories (see 'G-O') of the "*Office v1*" tool of the GBCSA must therefore equal the amount reflected by column F of that row (e.g. sum (G13:O13) = F13)
- 47. Any additional Preliminary amount allowed in 'C60' *for additional requirements* expected from the main contractor such as monitoring and reporting on Waste management, Procurement, etc will be reflected in 'F60'. The pro-rata portion of that amount that relates to the "*Indoor environment Quality*" to "*Innovation*" categories should be entered in 'G60' to 'O60'
- 48. The portion of the estimated Green Building Cost Premium (incl Tax) allocated to each of the other eight category of the "*Office v1*" tool of the GBCSA ("*Indoor environment Quality*" to "*Innovation*") are reflected by 'H72' to 'O72'