Objective of the estimate review: to ensure the policies and procedures of the department followed and appropriate rigour applied as outlined in this manual during the estimate development process and the cost estimate is ready to sign off.

Peer review – must be undertaken for all types of projects in the department by an experienced estimating personnel or specialist officer authorised by the regional / district director.

Concurrence review - must be carried out for all PAF, Type 1 and Type 2 projects with cost estimates over $25M by a suitably qualified and experienced estimator, independent of the project, approved by the regional / district director.

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| --- | --- | --- | --- | --- | --- | --- | --- |
| Estimate Prepared by**[[1]](#footnote-1)**: | | | Estimate Reviewed by**[[2]](#footnote-2)**: | | | Date of Review: | |
| Project Name: | | | Project Number: | | | | |
| **Project Stage:** | Strategic | Business Case | | Preliminary Design | Detail Design | | Tender |

|  |  |  |  |
| --- | --- | --- | --- |
| A. Conforming to policies, strategies and standards | | Y/N[[3]](#footnote-3) | Comments |
| 1. Does the estimate match the intent, scope, phase and stage of the project? PCEM Ed 8 refer Section 2.4 | |  |  |
| 1. Is the estimate conforming with Infrastructure Cost Estimating Policy? PCEM Ed 8 refer Section 2 | |  |  |
| 1. Does the estimate comply with the estimate practices of the department? PCEM Ed 8 refer Section 2.5 | |  |  |
| 1. Is the estimate “conforming with other related policies in the department? PCEM Ed 8 refer Section 2.6 and 2.6.1 | |  |  |
| 1. Does the estimate comply with the requirements for different phases in various project types? PCEM Ed 8 refer Table 2.4(c) | |  |  |
| 1. Does the estimate comply with requirements of the projects that are funded by the federal government? PCEM Ed 8 refer Section 2.6.7.1 | |  |  |
| 1. Has the PCB submitted (if applicable for projects funded by the federal government) being checked? PCEM Ed 8 refer Section 2.6.7.1 | |  |  |
| B. Presentation and completeness of documentation submitted for review | | Y/N3 | Comments |
| 1. Have the documents supplied for review comply with the current PCEM? PCEM Ed 8 refer Section 7 (F4906 Estimate Confidence Categories (Table 7.3) WBS, CBS) | |  |  |
| 1. Has the appropriate estimating method been used for the project types and stages and approved by the Project Manager? PCEM Ed 8 refer Section 9.1 (unit rate, first principles, global estimate, Types 1, 2 and 3) | |  |  |
| 1. Does the estimate include costs of all project stages? PCEM Ed 8 refer Section 3 (Construction Contractors costs, Principals costs (Concept, Development, Implementation and Finalisation costs and risk and contingencies) | |  |  |
| 1. Have the Principal’s costs calculated from first principles? PCEM Ed 8 refer Section 5.3, 5.4, 5.5 and 5.6 | |  |  |
| 1. Do the Principal’s costs include all the components? PCEM Ed 8 refer Section 3.3, Table 3.3 (project management, principal’s obligations, resumptions, PUP, principal supplied materials, service levies, environmental offset costs etc.) | |  |  |
| 1. Has the estimate classified into CapEx/OpEx dissections as required for reporting? | |  |  |
| 1. Has the estimate been submitted in out-turned dollars? PCEM Ed 8 refer Section 3.5 Escalation | |  |  |
| 1. Have the costs presented in appropriate project estimate structure components? PCEM Ed 8 ref Figure 3.2.2 (DJC, IJC, margins, TMR costs, inflation and risk and contingencies) | |  |  |
| 1. Have factors influencing estimating considered during the estimate development? PCEM Ed 8 refer Section 5.1 (scope, constraints, constructability, construction program, traffic management issues, location issues, PUP and sustainability / climate change issues) | |  |  |
| 1. Has the estimate benchmarked against district benchmarking data? PCEM Ed 8 refer Section 8 (global rates, key item rates, construction production rates) | |  |  |
| 1. Does the submission for review include electronic copies of assumptions, construction program, submission schedule, risk register, probability distributions, simulation details and @Risk data files? PCEM 8 Ref Section 4.1.2, 4.2.1 and 5.1.5 | |  |  |
| C. Application of the recommended estimating tools | | Y/N3 | Comments |
| 1. Has the cost items included in the submission schedule sufficiently cover for the scope and the all phases of the project? PCEM Ed 8 refer Section 5.1 (scope, constraints, constructability, construction program, traffic management issues, location issues, PUP and sustainability / climate change issues | |  |  |
| 1. Have the estimating tools recommended by the department used to develop the estimate and presented in appropriate format? PCEM Ed 8 refer Section 9.4 | |  |  |
| D. Risk evaluation and contingency development | | Y/N3 | Comments |
| 1. Has the appropriate risk assessment approach been used to produce the P90 estimate? (Quantitative for Type 1 and 2 or Qualitative for Type 3). PCEM Ed 8 refer Section 3.4 and 10.3 (risk register, benchmarking, strategic estimating matrix, @Risk) | |  |  |
| 1. Is the risk assessment technique used for the risk analysis process appropriate? PCEM Ed 8 refer Section 10.4 (qualitative and quantitative approaches, Monte Carlo simulation) | |  |  |
| 1. Have the project risks appropriately divided into Planned / Unplanned risks? PCEM Ed 8 refer Section 10.3.1 | |  |  |
| 1. Has the risk register submitted in Risk Context Profile format? PCEM Ed 8 refer Section 10.3 | |  |  |
| 1. Has the risk workshop undertaken to assess and verify risks as appropriate? PCEM Ed 8 refer Section 2.5.2 and 10.3.2.1 | |  |  |
| 1. Has the project contingency allowance verified to ensure it lies within the recommended contingency range for this stage? PCEM Ed 8 refer Table 3.4 | |  |  |
| 1. For Type 1 projects, have appropriate contingency allowances made against individual cost change categories? PCEM Ed 8 refer Section 3.4 and 10 | |  |  |
| 1. Are the ranges applied to planned risks in the probabilistic model appropriate? PCEM Ed 8 refer Section 10.3.4.3 | |  |  |
| 1. Are the consequence / likelihood ranges applied to unplanned risks reasonable? | |  |  |
| 1. Are the probability distribution (models) applied in @Risk are appropriate? PCEM Ed 8 refer Section 10.3.4.4 | |  |  |
| Satisfactory (expected process controls are in place and used satisfactorily)  Unsatisfactory (attach details of any controls that in your opinion are not in place and/or are not used satisfactorily)  Approved  Not approved | | | |
| Signature:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Date:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | |

1. To be completed by the Estimator. [↑](#footnote-ref-1)
2. To be reviewed by reviewer appointed by the Project Manager. [↑](#footnote-ref-2)
3. If yes, documentary evidence must be made available to the Region / District Director. [↑](#footnote-ref-3)