

COSTPCBCB51.2

Select, test and refine project solutions in planning and conservation



Overview

This unit requires you to identify and select existing approaches consistent with the brief and also obtain new sources of information and ideas if necessary. You will also need to develop and refine options, testing them and rejecting those that fail to meet the selected parameters. You will then need to recommend modifications to the brief and assess the implications. You will also need to record test results and feasible options.

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Performance criteria

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You must be able to:

- P1 identify existing **approaches** which are potentially consistent with the brief and select those which are most likely to contribute to solutions
- P2 obtain new sources of information and ideas, where existing **approaches** do not meet the **parameters** of the brief, which have the potential to suggest new and innovative solutions
- P3 develop the options which appear to have the greatest potential for success so that they are capable of testing
- P4 discuss the selected options with project team members, assess their observations and noting them for future reference
- P5 select and commission **tests** which will give valid and relevant information about the options
- P6 implement and monitor **tests** so that the validity of the options are maintained, and match the results to significant **parameters** of the brief
- P7 record **test** results and feasible options accurately
- P8 refine options which meet the **parameters** of the brief and test them repetitively until their ability to meet the selected **parameters** is clearly established
- P9 reject options which fail to meet the **parameters** and identify more likely alternatives
- P10 recommend modifications to the brief to allow the consideration of selected options and **approaches** which have the potential to meet the **parameters**, but fail to meet all the brief requirements
- P11 assess the implications of the modified brief so that the overall integrity is retained and **present** them in sufficient details to enable **decision makers** to select options

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Knowledge and understanding

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You need to know and understand:

- K1 what existing **approaches** do you identify as potentially consistent with the brief and selected as most likely to contribute to solutions (understanding)
- K2 how to discuss the selected options with project team members and note their observations for future reference (application)
- K3 how and why to assess project team members' observations (analysis)
- K4 how and why to assess the implications of the modified brief (analysis)
- K5 how and why to select those **approaches** which are most likely to contribute to project solutions (evaluation)
- K6 how and why to develop the options (synthesis)
- K7 how and why to select and commission appropriate **tests** (evaluation)
- K8 what to identify as likely alternative options (understanding)
- K9 how to obtain new sources of information (application)
- K10 how and why to recommend modifications to the brief (synthesis)
- K11 how and why to reject options which fail to meet the **parameters** (evaluation)
- K12 how to implement **tests** (application)
- K13 how to record and present **test** results and feasible options (application)
- K14 how and why to test options (analysis)
- K15 how and why to monitor **tests** (analysis)
- K16 how and why to match the results of **tests** to significant **parameters** of the brief (synthesis)
- K17 how to present **test** results (application)

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Scope/Range

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- 1 Design approaches:**
 - 1.1 those which are suggested by the brief
 - 1.2 previous knowledge and experience of similar work
 - 1.3 solutions by others to similar problems
- 2 Tests:**
 - 2.1 comparative
 - 2.2 consultative
 - 2.3 mathematical
 - 2.4 statistical and computer modelling
 - 2.5 simulation
 - 2.6 physical testing
 - 2.7 value management
- 3 Parameters:**
 - 3.1 visual and spatial
 - 3.2 functional performance
 - 3.3 technical performance
 - 3.4 requirements of relevant legislation and codes
 - 3.5 cost
 - 3.6 health and safety
 - 3.7 environmental quality and sustainability
 - 3.8 buildability
 - 3.9 value management
 - 3.10 scheduling
 - 3.11 access
 - 3.12 adaptability/flexibility
- 4 Present:**
 - 4.1 orally
 - 4.2 in writing
 - 4.3 graphically
- 5 Decision makers:**
 - 5.1 the client
 - 5.2 potential contractors
 - 5.3 potential investors
 - 5.4 funding agencies
 - 5.5 potential users
 - 5.6 heritage and regulatory bodies
 - 5.7 interest groups

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Developed by ConstructionSkills

Version Number 1

Date Approved March 2012

Indicate review date March 2018

Validity Current

Status Original

Originating organisation ConstructionSkills

Original URN COSTPCBCB51.2

Relevant occupations Town planners; chartered surveyors (not quantity surveyors); building inspectors; construction project manager and related professions

Suite Town Planning, Conservation and Building Control

Key Words Design options; design parameters; brief
