
Overview

This unit is concerned with undertaking and managing condition surveys. It is about deciding what surveys need to be done, and drafting survey briefs along with budgets and programmes.

You must have a deep knowledge of building conditions, and the skills to produce cost and time schedules for the surveys. It is about actually doing the surveys. The structure could be a building, a highway, a bridge, a reservoir, or any loadbearing or defensive construction.

You must be able to organise what you need to carry out the survey, deal with contingencies, take the necessary measurements and record the results. It is about collating the results of the survey and presenting them in a report.

You must be able to demonstrate your analytical and report-writing skills and your technical judgement (both quantitative and qualitative) concerning the condition of the structure(s).

Performance criteria

Recommend and agree a condition survey process

You must be able to:

- P1 identify the objectives and purpose of the condition survey
- P2 brief the people who will be involved, about the survey arrangements and the safety arrangements
- P3 collate available information and documents and select valid, accurate and relevant information for the condition survey process
- P4 identify and obtain necessary further information
- P5 draft a brief for the survey including significant factors
- P6 identify the levels and types of specialist support which will be needed and brief advisers with clear and accurate summaries of the information available
- P7 select methods and techniques for the condition survey process which meet the requirements of relevant professional codes of practice and protocols
- P8 prepare a budget and programme for the condition survey process
- P9 agree a budget and programme for the work

Inspect structures for condition

You must be able to:

- P10 consult the condition survey brief and purpose and obtain the equipment and resources and specialist advice that will be needed
- P11 check and confirm, before starting the condition survey, that people who will be affected have given their permission
- P12 take accurate observations and measurements which are necessary for the inspection and record them clearly, accurately and completely using agreed formats
- P13 make further investigations when observations are inconsistent with existing data and expected findings, and accurately identify the cause of inconsistencies
- P14 consider actual and potential causes of any failure and deterioration
- P15 identify and obtain specialist advice where complex issues are found

Prepare and present condition survey reports and records

You must be able to:

- P16 assemble and collate information on the condition survey
- P17 analyse all relevant evidence and information using appropriate methods and techniques and make a realistic assessment of condition
- P18 identify causes of probable failure and deterioration
- P19 prepare a condition survey report which meets the requirement of the brief
- P20 explain clearly where and why inspection and measurement may not have been possible
- P21 answer the client's questions about the condition survey and give appropriate clarification
- P22 maintain internal records which are clear, accurate and complete and conform to accepted professional and statutory requirements

Knowledge and understanding

You need to know and understand:

Recommend and agree a condition survey process

- K1 what to identify as the objectives and purpose of the condition survey (understanding)
- K2 how to brief the people who will be involved, about the survey arrangements and the safety arrangements (application)
- K3 how to collate available information and documents (application)
- K4 how and why to select valid, accurate and relevant information for the condition survey process (evaluation)
- K5 what to identify as necessary further information (understanding)
- K6 how to obtain necessary further information (application)
- K7 how to draft a brief for the survey including significant factors (application)
- K8 what to identify as the levels and types of specialist support which will be needed and brief advisers with clear and accurate summaries of the information available (understanding)
- K9 how and why to select methods and techniques for the condition survey process which meet the requirements of relevant professional codes of practice and protocols (evaluation)
- K10 how to prepare a budget and programme for the condition survey process (application)
- K11 how and why to agree a budget and programme for the work (evaluation)

Inspect structures for condition

You need to know and understand:

- K12 how to consult the condition survey brief and purpose and obtain the equipment and resources and specialist advice that will be needed (application)
- K13 how to check and confirm, before starting the condition survey, that people who will be affected have given their permission (application)
- K14 how to take observations and measurements which are necessary for the inspection (application)
- K15 how to record observations clearly, accurately and completely using agreed formats

- K16 how and why to make further investigations when observations are inconsistent with existing data and expected findings (analysis)
- K17 what to identify as the cause of inconsistencies (understanding)
- K18 how to consider actual and potential causes of any failure and deterioration (application)
- K19 what to identify as specialist advice where complex issues are found (understanding)
- K20 how to obtain specialist advice where complex issues are found (application)

Prepare and present condition survey reports and records

You need to know and understand:

- K21 how to assemble and collate information on the condition survey (application)
- K22 how and why to analyse all relevant evidence and information using appropriate methods and techniques and make a realistic assessment of condition (analysis)
- K23 what to identify as causes of probable failure and deterioration (understanding)
- K24 how to prepare a condition survey report which meets the requirement of the brief (application)
- K25 how to explain clearly where and why inspection and measurement may not have been possible (application)
- K26 how to answer the client's questions about the condition survey and give appropriate clarification (application)
- K27 how to maintain internal records which are clear, accurate and complete and conform to accepted professional and statutory requirements (application)

Additional Information

Scope/range

Recommend and agree a condition survey process

1. Purpose:

- 1.1. stability
- 1.2. soundness
- 1.3. use/adaptation
- 1.4. value
- 1.5. health and safety
- 1.6. environmental
- 1.7. conservation/heritage requirements
- 1.8. third party use

2. Information:

- 2.1. photographs (including aerial photographs)
- 2.2. maps
- 2.3. charts
- 2.4. drawings
- 2.5. digital data
- 2.6. archive records
- 2.7. legal documents
- 2.8. client records
- 2.9. tenants
- 2.10. site owners
- 2.11. site managers
- 2.12. previous owners
- 2.13. local authorities
- 2.14. statutory authorities
- 2.15. public utilities
- 2.16. government department consultative bodies (including heritage bodies)
- 2.17. public and specialist libraries and archives

3. Process:

- 3.1. inspection/ field survey
- 3.2. documentary/archival research
- 3.3. risk assessment

4. Significant factors:

- 4.1. degree of urgency
- 4.2. gaps in information
- 4.3. susceptibility to damage
- 4.4. health and safety risk
- 4.5. need to inhibit deterioration
- 4.6. structural integrity
- 4.7. structural significance
- 4.8. impact on clients and users
- 4.9. third party
- 4.10. survey costs and methods
- 4.11. comprehensiveness/completeness of survey

Inspect structures for condition

5. Purpose:

- 5.1. stability/soundness
- 5.2. use/adaptation
- 5.3. value
- 5.4. health and safety
- 5.5. environmental
- 5.6. conservation/heritage requirements
- 5.7. third party use

6. Record:

- 6.1. written
- 6.2. graphical
- 6.3. electronic
- 6.4. photographic

Prepare and present condition survey reports and records

7. Information:

- 7.1. inspection observations and measurements
- 7.2. investigation and research findings
- 7.3. industry standards and legislation
- 7.4. published technical data

8. Analyse:

- 8.1. degree of urgency
- 8.2. gaps in information
- 8.3. susceptibility to damage
- 8.4. health and safety risk
- 8.5. need to inhibit deterioration
- 8.6. structural integrity
- 8.7. cultural significance
- 8.8. impact on clients and users

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