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Temporary works: A fundamental element of construction site safety

Title:

Temporary works: A fundamental element of construction site safety

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Abstract:

Temporary works are a critical element of the construction process that facilitate and enable the construction of permanent works. Despite their fundamental role in the construction process they often do not receive the same attention as permanent works and their importance can easily be overlooked.

Temporary works in the construction industry has come a long way since the catastrophic collapses of the 1970s, which as a direct result induced the formation of the "Bragg Report". The recommendations of the report catalysed reform in the industry regarding temporary works and since then the industry has seen tremendous improvement as no failures of the same extent have occurred. The industry still, however, remains as the most dangerous, accounting for the largest share of workplace fatalities. Therefore, more must be done to improve, and efforts should be directed at all aspects relating to site safety, including temporary works.

This study was undertaken concentrating on temporary works management in the construction industry with a focus on construction site safety.



Research aim:

The aim of this study was to assess the current state of temporary works management across the construction Industry and distinguish factors which contribute to implicating safety on construction sites. This was used to develop a model which can be adopted by organisations to ensure they have a safe management protocol in place for the control of temporary works in their organization.

Research objectives:

To achieve its aim, the following objectives were set:

- review the current literature regarding all aspects related to the management of temporary works and factors related which affect and implicate the safety of construction sites;
- assess and quantify the impact that temporary works management has on the safety of construction sites;
- devise a suitable plan to investigate the management methods and processes currently in use across the industry;
- analyse the findings and use them as a guide to develop a suitable model.

Research strategy:

This study was organised as follows:

Chapter 2 (Literature Review)

This presents the findings from the study of current literature available regarding temporary works and site safety in the United Kingdom construction industry. Legal aspects relating to these are also reviewed to provide an overview of the legal obligations that fall on industry professionals.

Chapter 3 (Methodology)

 This contains an overview of the various research methods adopted, as well as processes followed to obtain the data required for analysis, which was essential for the development of the model.

Chapter 4 (Data Analysis and Results)

 This chapter presents the findings and results of the document analysis, summaries of the interviews conducted, and an overview of the discussions held at the Temporary Works Forum (TWf) meetings attended.

Chapter 5 (Discussion)

 In this chapter the results presented in the previous chapter are discussed.

Chapter 6 (Model)

o In this chapter the model that was devised is presented.



Chapter 7 (Development and Validation)

o In this chapter the process relating to the development as well as validation of the model is presented.

Chapter 8 (Conclusions and Recommendations)

 This is the final chapter which presents the conclusions and recommendations of the study.

Conclusions and Recommendations:

The study conducted demonstrated how the management of temporary works, or lack thereof, leads to dangerous outcomes which implicate construction site safety.

Ineffective management of temporary works is still a common occurrence despite the improvements and progress which have been made since the collapses of the 1970s. It is unacceptable that safety is compromised as a result of avoidable aspects such as the unsafe and ineffective management of temporary works and efforts should be made industry wide to resolve this.

It is hoped that the model developed (see **Figure 1**) - in line with safety management systems, legal obligations and best practice - in this study will influence positive change in the management of temporary works on construction sites.

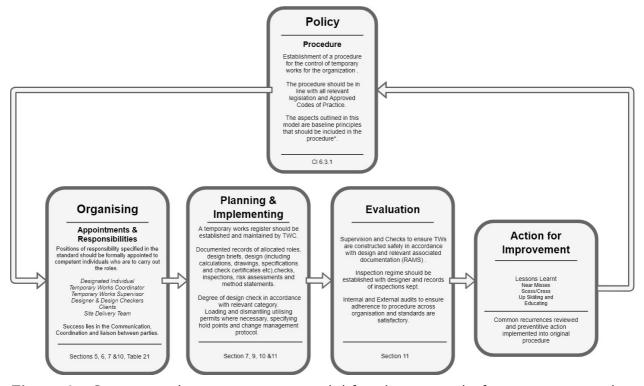


Figure 1 - Conceptual management model for the control of temporary works

NOTE: The Section references are to BS 5975: 2008+A1:2011

Chairman:



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Background

The purpose of this **TWf Research Briefing Note** is to disseminate the main findings of academic research. The findings – and any opinion expressed – are those of the researcher(s) and do not necessarily reflect views of the Temporary Works Forum (TWf).

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