

**MANAGEMENT OF DISPUTE RELATED TO
CONTRACTORS LIABILITY UNDER DIFFERING
SITE CONDITIONS IN DESIGN AND BUILD
PROJECTS**

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Master of Science in Construction Law and Dispute Resolution

Department of Building Economics

University of Moratuwa

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Dissertation submitted in partial fulfilment of the requirements for the
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DECLARATION

I declare that this is my own work, and this dissertation does not incorporate without acknowledgement any material previously submitted for a Degree or Diploma in any other University or institute of higher learning and to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

Further, I acknowledge the intellectual contribution of my research supervisor Ch. QS. Prof. (Mrs.) B.A.K.S. Perera for the successful completion of this research dissertation. I affirm that I will not make any publication from this research without the name(s) of my research supervisor(s) as contributing author unless otherwise, I have obtained written consent from my research supervisor.

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Date

The above candidate has carried out research for the Dissertation under my supervision.

.....

.....

Ch. QS Prof. (Mrs.) B.A.K.S. Perera

Date

Signature of the supervisor:

Management of Dispute Related to Contractor's Liability Under Differing Site Conditions in Design and Build Projects

ABSTRACT

The Design and Build Procurement method is one of the most frequently used procurement methods in the present construction industry. It releases Employers from the design responsibilities and transfers design and construction responsibilities to the Contractor. Further, Differing Site Conditions are one of the unforeseen, unpredictable risks construction projects face, and it acquires considerable additional time and cost to complete the project. Hence Contractors are keen on claiming the Differing Site Conditions situation, one of the highly disputed claim types in the Design and Build projects. Thus this research aims to manage the contractual disputes related to the Contractor's Liability under Differing Site Conditions in Design and Build Projects. Initially, a comprehensive literature survey was conducted, followed by selection of three case studies. Document review and expert interviews helped gather information about the Design and Build Projects in Sri Lanka. The research findings revealed that Contractors' Differing Site Conditions liabilities towards the D&B projects and types of Differing Site Conditions disputes from the literature review were validated via interviews. In addition, the interviews disclosed the new Differing Site Conditions liabilities of the Design and Build Contractor and Differing Site Conditions disputes. The research disclosed the D&B Contractor's non-perform DSC liabilities and reasons for the non-performance. The study outcome reveals that validation of Employer-provided data and not conducting a proper site investigation before bid submission are some DSC liabilities non-performed by the D&B Contractors. The research further identified that the main reasons for this non-performance are the negligence and unawareness of the DSC liabilities by D&B Contractors and the cost and time limit to include a detailed site investigation during the bidding period. The literature revealed the contractual and technical parameters to manage each type of Differing Site Conditions dispute, and the interviews introduced new parameters to manage the Differing Site Conditions disputes. The interview results revealed that establishing the DSC parameters, DSC evaluation techniques, and identifying DSC risk responsibilities in the Contract are primary contractual parameters. Doing a detailed site investigation and obtaining technical experts' knowledge to identify and analyse the potential DSC risks are a few technical parameters to manage the DSC risk as of the interview response. Managing the Differing Site Conditions disputes in the construction project is a win-win situation for both the Employer and the Contractor. This research can be a benchmark for further study in Differing Site Conditions disputes.

Keywords: *Differing Site Conditions, Design and Build Contracts, Contractor's Liabilities*

DEDICATION

*I dedicate this research to my little
angels - son and daughter - for their
patience and support*

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This research is a result of immense support and dedication given by many people in different ways. Therefore, all of them shall get gratitude for their great and honourable commitments provided.

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TABLE OF CONTENT

DECLARATION	i
ABSTRACT	ii
DEDICATION	iii
ACKNOWLEDGMENT	iv
TABLE OF CONTENT	v
LIST OF FIGURES	ix
LIST OF TABLES	x
LIST OF ABBREVIATIONS	xi
LIST OF APPENDICES	xii
CHAPTER 1	1
1. INTRODUCTION	1
1.1 Background	1
1.2 Research Problem	3
1.3 Aim	5
1.4 Objectives	5
1.5 Scope and Limitations.....	6
1.6 Methodology	6
1.7 Structure of the Thesis	7
CHAPTER 2	8
2. LITERATURE REVIEW	8
2.1 Introduction.....	8
2.2 Construction Project Procurement	8
2.2.1 Design and Build Projects.....	9
2.2.2 Characteristics of the Design and Build Project	10

2.3	What is meant by Differing Site Conditions?	12
2.3.1	Type I Condition	13
2.3.2	Type II Condition.....	15
2.3.3	Type III Condition	16
2.4	Contractor’s Liability for the Differing Site Conditions in the Design and Build Projects.....	17
2.5	Disputes in Differing Site Conditions in the Design and Build Projects	21
2.5.1	Disputes related to Type I Condition	22
2.5.2	Disputes related to Type II Condition.....	23
2.6	Contractual Parameters used in Design and Build Projects to minimise DSC Disputes	26
2.6.1	DSC Clause in Design and Build Contracts.....	29
2.6.1.1	FIDIC Yellow Book.....	29
2.6.1.2	FIDIC Silver Book - First Edition 1999.....	31
2.6.1.3	ENAA Model Form - International Contract for Process Plant Construction 31	
2.6.2	Conditions Typically Covered by Differing Site Condition Clauses.....	32
2.7	Technical Parameters used in Design and Build Projects to minimise DSC Disputes	34
2.8	Theoretical Framework.....	36
2.9	Why is it important to manage the contractual disputes related to the Contractor’s Liability under Differing Site Conditions in Design and Build Projects?.....	38
2.10	Summary	39
CHAPTER 3		40
3.	RESEARCH METHODOLOGY	40
3.1	Introduction.....	40
3.2	Research Design.....	40
3.3	Research Approaches.....	40
3.4	Selection of Appropriate Research Approach for this Study	42
3.5	Research Strategy.....	42
3.5.1	Selection of Research Strategy for this Study	43
3.5.1.1	Case Study Design	43
3.5.1.2	Documentary Review.....	43
3.5.1.3	Expert Interviews	44

3.6	Research Process.....	45
3.7	Summary	46
CHAPTER 04		47
4.	RESEARCH FINDINGS AND DISCUSSION.....	47
4.1	Introduction.....	47
4.2	Analysis of Case Studies.....	47
4.2.1	Document Review.....	47
4.2.1.1	Details of Reviewed Documents.....	48
4.2.2	Semi-Structured Interviews.....	50
4.2.2.1	Objectives of Interviews	50
4.2.3	Respondent details for interviews	50
4.2.4	Background of Cases	51
4.3	Research Findings.....	54
4.3.1	Contractor’s Liability related to Differing Site Conditions in Design and Build Projects.....	54
4.3.2	Fulfilment of the Contractor’s Liability under DSC in D&B Projects and Reasons for not performing the Contractor’s Liability towards DSC.....	58
4.3.3	Differing Site Condition Disputes in the Design and Build Construction Projects	61
4.3.4	Reasons for DSC disputes in the Design and Build Construction Projects....	65
4.3.5	Management of DSC Disputes in Design and Build Projects.....	67
4.4	Discussion.....	76
4.5	Summary	78
CHAPTER 05		79
5.	CONCLUSIONS AND RECOMMENDATIONS	79
5.1	Introduction.....	79
5.2	Overview of the Objectives Achieved in the Study	79
5.3	Recommendations.....	83
5.4	Limitations	84
5.5	Further Research	84
6.	REFERENCES	85

7. APPENDIX A: INTERVIEW GUIDELINE..... 94

LIST OF FIGURES

Figure 1.1: Structure of the Thesis.....	7
Figure 3.1: Research Process	45

LIST OF TABLES

Table 2.1: Key Responsibilities of the Design and Build Contactor toward the DSC	20
Table 2.2: DSC Disputes of Type I and Type II Conditions.....	25
Table 3.1: Summary of available Research Approaches	41
Table 4.1: Details of Reviewed Documents.....	48
Table 4.2: Profile of Interviewees.....	51
Table 4.3: Background of Cases	52
Table 4.4: DSC Liabilities toward the D&B Contractor.....	56
Table 4.5: Investigate the fulfilment of the Contractor’s Liability of DSC and Reasons for not performing the Contractor’s Liability towards DSC	59
Table 4.6: Differing Site Condition Disputes in the Design and Build Construction Projects.....	62
Table 4.7: Reasons for DSC Disputes in the Design and Build Construction Project.....	66
Table 4.8: Contractual Parameters to Manage DSC Disputes in Design & Build Projects.....	69
Tables 4.9: Technical Parameters to Manage the DSC Diputes in Desgn & Build Projects	72

LIST OF ABBREVIATIONS

Abbreviation	Description
DSC	Differing Site Conditions
D&B	Design and Build
FIDIC	Fédération Internationale Des Ingénieurs-Conseils
EPC	Engineering, Procurement and Construction
ENAA	Engineering Advancement Association of Japan
CAR	Contractor's All Risk Policy

LIST OF APPENDICES

Appendix	Description	Page
APPENDIX A	Interview Guideline	94